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Search History

DATE: Wednesday, February 12, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L32	L31 and information	149	L32
L31	L30 and (points or anchors)	152	L31
L30	L29 and (radials or extentions)	158	L30
L29	map near5 database	4766	L29
L28	L26 and point	61	L28
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L24	l23 and extend$	1078	L24
L23	l22 and radials	1164	L23
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DB=USPT; PLUR=YES; OP=OR			
L21	5636122.pn.	1	L21
L20	5646629.pn.	1	L20
L19	5794178.pn.	1	L19
L18	5901214.pn.	1	L18
L17	5982868.pn.	1	L17
L16	5944769.pn.	1	L16
L15	6085098.pn.	1	L15
L14	6292743.pn.	1	L14
L13	6038569.pn.	1	L13
L12	5682525.pn.	1	L12
L11	5543789.pn.	1	L11
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L10	5487139.uref.	10	L10
L9	5848373.uref.	51	L9
L8	(((709/217)!.CCLS.))	1736	L8
L7	(((709/$)!.CCLS.))	22829	L7
L6	(((707/10)!.CCLS.))	2705	L6
L5	(((707/3)!.CCLS.))	2494	L5
L4	((707/$)!.CCLS.)	14297	L4
L3	5848373.pn.	2	L3
L2	5488373.pn.	2	L2
L1	5487139.pn.	2	L1

END OF SEARCH HISTORY

L32: Entry 64 of 149 File: USPT Apr 2, 2002

US-PAT-NO: 6366851
DOCUMENT-IDENTIFIER: US 6366851 B1

TITLE: Method and system for automatic centerline adjustment of shape point data for a geographic database

DATE-ISSUED: April 2, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Chojnacki; Robert	Chicago	IL		
Feigen; Jerry	Chicago	IL		
Boylan; A. Merri	Lemont	IL		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Navigation Technologies Corp.	Chicago	IL			02

APPL-NO: 09/ 426341 [PALM]
DATE FILED: October 25, 1999

INT-CL: [07] G06 K 9/00

US-CL-ISSUED: 701/208
US-CL-CURRENT: 701/208

FIELD-OF-SEARCH: 701/201, 701/208, 701/209, 701/210, 701/211, 701/213, 340/995

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5214757	May 1993	Mauney et al.	
☐	5524202	June 1996	Yokohama	
☐	5633946	May 1997	Lachinski et al.	
☐	5848375	December 1998	Nunobiki et al.	
☐	6035253	March 2000	Hayashi et al.	

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 807 803	May 1997	EP	
0 890 823	June 1998	EP	
0921 509	June 1999	EP	
WO 95/32483	November 1995	WO	

OTHER PUBLICATIONS

Beard, M. Kate, "Theory of the Cartographic Line Revisited/Implications for Automated Generalization"; Cartographica, vol. 28, No. 4, Winter 1991, pp. 32-58.
McMaster, Robert Brainerd, "Automated Line Generalization"; Cartographica 24(2): 74-44.
Nickerson, Bradford G., "Automated Cartographic Generalization for Linear Features"; Cartographica, vol. 25, No. 3, 1998, pp. 15-66.
Visvalingam, Mahes and Williamson, Peter J., "Simplification and Generalization of Large Scale Data for Roads: A Comparison of Two Filtering Algorithms"; Cartography and Geographic Information Systems, vol. 22, No. 4, 1995, pp. 264-275.

ART-UNIT: 3661

PRIMARY-EXAMINER: Camby; Richard M.

ABSTRACT:

A process and system for collecting data about roads located in a geographic area and using the collected data to develop representations of the roads for a geographic database. Data representing positions along roads are acquired using equipment installed in a vehicle which is driven on the roads. The data acquired while driving may be smoothed and fused. The data acquired while driving are processed by a program that automatically determines new coordinates to adjust the represented positions to align with the centerlines of the represented roads. Data including the new coordinates are stored in the geographic database.

21 Claims, 39 Drawing figures

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L32: Entry 88 of 149 File: USPT Mar 13, 2001

US-PAT-NO: 6202023
DOCUMENT-IDENTIFIER: US 6202023 B1

TITLE: Internet based geographic location referencing system and method

DATE-ISSUED: March 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hancock; S. Lee	Newport Beach	CA		
Dana; Peter H.	Georgetown	TX		
Morrison; Scott D.	Mission Viejo	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
GO2 Systems, Inc.	Irvine	CA			02

APPL-NO: 09/ 257462 [PALM]
DATE FILED: February 25, 1999

PARENT-CASE:
RELATED APPLICATIONS This application is a continuation-in-part of U.S. patent application Ser. No. 09/188,153, filed Nov. 4, 1998, now U.S. Pat. No. 6,047,236, which is a continuation of U.S. patent application Ser. No. 08/701,586, filed Aug. 22, 1996, now U.S. Pat. No. 5,839,088. The above referenced patent and applications are incorporated herein by reference as if set forth in full.

INT-CL: [07] G06 F 17/30, G01 S 5/02, H04 Q 7/32

US-CL-ISSUED: 701/201; 701/208, 701/213
US-CL-CURRENT: 701/201; 701/208, 701/213

FIELD-OF-SEARCH: 701/201, 701/208, 701/211, 701/213, 340/995, 342/357.09, 342/357.1, 709/203, 455/456, 455/457

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4677561	June 1987	Akama et al.	
☐	4974170	November 1990	Bouve et al.	
☐	5155689	October 1992	Wortham	455/456
☐	5289195	February 1994	Inoue	
☐	5296861	March 1994	Knight	
☐	5311434	May 1994	Tamai	
☐	5323322	June 1994	Mueller et al.	
☐	5345244	September 1994	Gildea et al.	
☐	5355140	October 1994	Slavin et al.	
☐	5359332	October 1994	Allison et al.	
☐	5396254	March 1995	Toshiyuki	
☐	5406491	April 1995	Lima	
☐	5418538	May 1995	Lau	
☐	5422814	June 1995	Sprague et al.	
☐	5424951	June 1995	Nobe et al.	
☐	5436632	July 1995	Sheynblat	
☐	5450344	September 1995	Woo et al.	
☐	5452217	September 1995	Kishi et al.	
☐	5471392	November 1995	Yamashita	
☐	5477458	December 1995	Loomis	
☐	5543789	August 1996	Behr et al.	340/995
☐	5732074	March 1998	Spaur et al.	370/313
☐	5802492	September 1998	DeLorme et al.	455/456
☐	5839088	November 1998	Hancock et al.	
☐	5938721	August 1999	Dussell et al.	701/211
☐	6009363	December 1999	Beckert et al.	701/33

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
9-166450	June 1997	JP	
WO 97/07467	February 1997	WO	
WO 98/59506	December 1998	WO	

ART-UNIT: 361

PRIMARY-EXAMINER: Zanelli; Michael J.

ABSTRACT:

A system and method for automatically providing services over a computer network, such as the Internet, for users in a mobile environment based on their geographic location. A client computer system is equipped with a local storage device, a wireless transceiver, an input device, an output device and an automatic location identifying (ALI) device. An application program is installed on the client computer system that prompts the user to input information. The application program builds a data packet comprising location information and user information and stores the data packet on the local client storage device. The client computer system connects with a server coupled to a computer network, such as the Internet. Upon connection, the client automatically transmits the electronic data packet to the server. The primary

server maintains a database that contains a list of enhanced services. The information in the data packet is used to formulate a database query. The result of the database query is an address of a particular enhanced server that matches the client's request. A specific universal resource locator (URL) that contains the address of the enhanced server is transmitted to the client. The client computer system launches a web browser and connects to the enhanced server. Upon connection relevant data customized for the client's location is automatically displayed without additional input from the user.

23 Claims, 27 Drawing figures

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L32: Entry 123 of 149 File: USPT Jun 30, 1998

US-PAT-NO: 5774826
DOCUMENT-IDENTIFIER: US 5774826 A

TITLE: Optimization of survey coordinate transformations

DATE-ISSUED: June 30, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
McBride; Kenneth W.	Los Altos	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Trimble Navigation Limited	Sunnyvale	CA			02

APPL-NO: 08/ 565589 [PALM]
DATE FILED: November 30, 1995

INT-CL: [06] G01 S 5/02

US-CL-ISSUED: 701/207; 701/213, 342/357, 342/457
US-CL-CURRENT: 701/207; 342/357.01, 342/457, 701/213

FIELD-OF-SEARCH: 364/449.1, 364/449.7, 364/559, 342/357, 342/457, 340/988, 340/995

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	3659085	April 1972	Potter et al.	235/150.2
☐	4135190	January 1979	DiMatteo et al.	434/105R
☐	4253150	February 1981	Scovill	364/449
☐	4428052	January 1984	Robinson et al.	364/436
☐	4428057	January 1984	Setliff et al.	364/521
☐	4590569	May 1986	Rogoff et al.	364/452
☐	4685068	August 1987	Greco et al.	364/518
☐	4791572	December 1988	Green et al.	364/449
☐	4829304	May 1989	Baird	342/63
☐	4841460	June 1989	Dewar et al.	364/571.02
☐	4891761	January 1990	Gray et al.	364/452
☐	4899161	February 1990	Morin et al.	342/451
☐	4939646	July 1990	Essinger et al.	364/413.22
☐	4939661	July 1990	Barker et al.	364/443
☐	4939663	July 1990	Baird	364/449

☐	4954833	September 1990	Evans et al.	342/357
☐	4982332	January 1991	Saito et al.	364/449
☐	4982504	January 1991	Soderberg et al.	33/502
☐	4998212	March 1991	Dedieu et al.	364/518
☐	5001647	March 1991	Rapiejko	364/453
☐	5030957	July 1991	Evans	342/357
☐	5057835	October 1991	Factor et al.	340/995
☐	5121326	June 1992	Moroto et al.	364/449
☐	5161886	November 1992	De Jong et al.	364/449
☐	5172323	December 1992	Schmidt	364/453
☐	5204818	April 1993	Landecker et al.	364/459
☐	5208757	May 1993	Appriou et al.	364/456
☐	5208763	May 1993	Hong et al.	364/551.02
☐	5214757	May 1993	Mauney et al.	395/161
☐	5231470	July 1993	Koch	356/376
☐	5233357	August 1993	Ingensand et al.	342/352
☐	5271066	December 1993	Leonard	382/8
☐	5280370	January 1994	Faust et al.	358/488
☐	5299300	March 1994	Femal et al.	395/128
☐	5321797	June 1994	Morton	395/131
☐	5325482	June 1994	Bormans	395/161
☐	5339246	August 1994	Kao	364/457
☐	5341463	August 1994	Wescott et al.	395/129
☐	5344105	September 1994	Youhannaie	244/3.14
☐	5345086	September 1994	Bertram	250/558
☐	5357437	October 1994	Polvani	364/449
☐	5363304	November 1994	Awano et al.	364/424.07
☐	5414462	May 1995	Veatch	348/135
☐	5581259	December 1996	Schipper	342/451
☐	5614913	March 1997	Nichols et al.	342/357

OTHER PUBLICATIONS

Alfred Leick; GPS Satellite Surveying; John Wiley & Sons; New York, NY; 2.sup.nd Ed.; 1995; pp. 215-232, 410-429, 486-499.
John P. Synder; Map Projections--A Working Manual; U.S. Geological Survey Professional Paper 1395; U.S. Government Printing Office; 1987.
Daniel Goldenberg et al.; A Common Coordinate System for the Utilization of Data from Several Radars; MIT Lincoln Laboratory Tech. Report, No. 67; Sep. 1954.

ART-UNIT: 234

PRIMARY-EXAMINER: Zanelli; Michael

ABSTRACT:

Method and apparatus for optimally transforming location coordinates from a global system GC1 of survey coordinates to a local system LC1 of coordinates in a location survey. Linear translation transformations T.sub.G1 and T.sub.L1 are determined that translate the GC1 coordinates and the LC1 coordinates new coordinates in coordinate systems LC1' and GC2 having a corresponding origin. A rotation transformation R(.phi.,.theta.), having a selected azimuthal rotation angle .phi. and a selected polar rotation angle .theta., that transforms the coordinate system LC1' into

another coordinate system L[redacted] so that a coordinate plane or coordinate axes in LC2 are aligned with a coordinate plane or coordinate axes in GC2. An optimized invertible transformation T.sub.LC2,GC2 is found that minimizes a selected functional and carries GC2 into LC2. The optimal transformation of GC1 into LC1,

T.sub.LC1,GC1 =(T.sub.L1,tr).sup.-1 R(.phi.,.theta.).sup.-1 T.sub.LC2,GC2 T.sub.G1,tr

is then applied to one or more location coordinate triples (x.sub.G1, y.sub.G1, z.sub.G1) in GC1 to produce corresponding location coordinate triples (x.sub.L1, y.sub.L1, z.sub.L1) in LC1. The inverse transformation (T.sub.LC1,GC1).sup.-1 carries LC1 into GC1. The location coordinates in the global coordinate system GC1 can be determined using any suitable location determination system, such as GPS, GLONASS, Loran, Decca, Omega, Tacan or an FM subcarrier system.

20 Claims, 4 Drawing figures

L32: Entry 129 of 149 File: USPT May 13, 1997

US-PAT-NO: 5630035
DOCUMENT-IDENTIFIER: US 5630035 A

TITLE: Method of sampling a terrain data base

DATE-ISSUED: May 13, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gjullin; Robert M.	Corrales	NM		
Thorpe; Douglas E.	Albuquerque	NM		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Honneywell Inc.	Minneapolis	MN			02

APPL-NO: 08/ 183533 [PALM]
DATE FILED: January 18, 1994

INT-CL: [06] G06 F 15/00, G05 D 1/00

US-CL-ISSUED: 395/127
US-CL-CURRENT: 345/427

FIELD-OF-SEARCH: 395/121, 395/123, 395/125, 395/127, 395/130, 364/443, 364/423, 364/458, 340/988, 340/995

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	3071873	January 1963	Zahner et al.	
☐	4899293	February 1990	Dawson et al.	395/123

OTHER PUBLICATIONS

Thompson et al., "Digital Terrain Analysis Station (DTAS)", Dept. of Army Unclassified Report No. ETL-R040, Aug. 28, 1982.

ART-UNIT: 242

PRIMARY-EXAMINER: Zimmerman; Mark K.

ASSISTANT-EXAMINER: Burwell; Joseph R.

ABSTRACT:

A convergence model is shown and described for accommodating variation in data post spacing in a digital terrain elevation database (DTED) based on longitude and latitude address values for data posts. Under such a database structure, data posts lying along lines of latitude vary in spacing according to latitude, and converge at

the poles with zero spacing therebetween. To scan a circular region of data posts relative to a given data post, e.g., a threat installation, this variation in data post spacing is considered by appropriately scaling sample step spacing along radials traversed in executing a radial spoke scan pattern. In this manner, a circular region of data posts surrounding a given data post may be sampled using simple, dedicated hardware despite this variation in data post spacing.

3 Claims, 4 Drawing figures

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L10: Entry 3 of 10 File: USPT Aug 8, 2000

US-PAT-NO: 6101496
DOCUMENT-IDENTIFIER: US 6101496 A

TITLE: Ordered information geocoding method and apparatus

DATE-ISSUED: August 8, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Esposito; David J.	Delmar	NY		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
MapInfo Corporation	Troy	NY			02

APPL-NO: 09/ 093259 [PALM]
DATE FILED: June 8, 1998

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/6; 379/220, 701/207, 701/208, 705/10, 705/62, 707/3, 707/4, 707/5, 707/7, 707/104
US-CL-CURRENT: 707/6; 701/207, 701/208, 705/10, 705/62, 707/104.1, 707/3, 707/4, 707/5, 707/7

FIELD-OF-SEARCH: 707/3-8, 707/104, 707/530, 707/532, 701/207-208, 705/10, 705/62, 379/220

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4827419	May 1989	Selby, III	707/104
☐	4839700	June 1989	Ramesham et al.	357/2
☐	4879658	November 1989	Takashima et al.	701/207
☐	4888699	December 1989	Knoll et al.	701/207
☐	4982332	January 1991	Saito et al.	701/208
☐	4989151	January 1991	Nuimura	701/207
☐	5133052	July 1992	Bier et al.	707/530
☐	5210868	May 1993	Shimada et al.	701/200
☐	5381338	January 1995	Wysocki et al.	701/207
☐	5426780	June 1995	Gerull et al.	707/3
☐	5448696	September 1995	Shimada et al.	345/357
☐	5470233	November 1995	Fruchterman et al.	434/112
☐	5487139	January 1996	Saylor et al.	345/435
☐	5506897	April 1996	Moore et al.	379/127
☐	5532838	July 1996	Barbari	358/400
☐	5533107	July 1996	Irwin et al.	379/201
☐	5546578	August 1996	Takada	707/5
☐	5553407	September 1996	Stump	37/348
☐	5568384	October 1996	Robb et al.	707/532
☐	5594650	January 1997	Shah et al.	701/207
☐	5634049	May 1997	Pitkin	707/102
☐	5636122	June 1997	Shah et al.	701/207
☐	5646629	July 1997	Loomis et al.	701/300
☐	5794178	August 1998	Caid et al.	704/9
☐	5901214	May 1999	Shaffer et al.	379/220
☐	5982868	November 1999	Shaffer et al.	379/220

OTHER PUBLICATIONS

Fiset, R. et al., "An automatic road extraction method using a map-guided approach combined with neural networks for cartographic database validation purposes", International Geoscience and Remote Sensing Symposium, May 1996. IGARSS '96. Remote Sensing for.

Kamijo, S. et al., "Digital road map database for vehicle navigation and road information systems", Conference Record Vehicle Navigation and Information System Conference, Sep. 11-13, 1989, pp. 319-323.

Kawamura, H. et al., "N-land database for research of the Japanese land and coastal are with complicated geographical features", International Geoscience and Remote Sensing Symposium, IGARSS '93. Better Understanding of Earth Environment, Aug. 18-21, 1993.

Silberschatz, A. et al., "Operating System Concepts", Addison-Wesley Publishing Company, Inc., Fourth Edition, Jan. 1995, ISBN 0-201-50480-4, Chapter 3, sections 3.3.3 and 3.3.5, pp. 72-73.

Suter, M. et al., "Automated generation of visual simulation databases using remote sensing and GIS", Proceedings, IEEE Conference on Visualization, 1995. Visualization '95., Oct. 29-Nov. 3, 1995, pp. 86-93.

Sweeney, I.E., Jr., "Comparative benefits of various automotive navigation and routing technologies", IEEE 1996 Position Location and Navigation Symposium, Apr. 22-26, 1996, pp. 415-421.

ART-UNIT: 271

PRIMARY-EXAMINER: Black; Thomas G.

ASSISTANT-EXAMINER: Alam; Shahid

ABSTRACT:

Ordered information data 22 is combined with prior geocoded data 21 to improve geocoding. The combined records are sorted by precision 33. The two highest precision groups are interpolated to further geocode the records and provide enhanced street address products 42.

29 Claims, 13 Drawing figures

WEST

End of Result Set

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L9: Entry 51 of 51 File: USPT Aug 31, 1999

US-PAT-NO: 5946687
DOCUMENT-IDENTIFIER: US 5946687 A

TITLE: Geo-enabled personal information manager

DATE-ISSUED: August 31, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gehani; Narain H.	Summit	NJ		
Roome; William D.	Murray Hill	NJ		
Trapp; Richard James	Charlotte	NC		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Lucent Technologies Inc.	Murray Hill	NJ			02

APPL-NO: 08/ 949074 [PALM]
DATE FILED: October 10, 1997

INT-CL: [06] G06 F 17/30

US-CL-ISSUED: 707/10; 707/104
US-CL-CURRENT: 707/10; 707/104.1

FIELD-OF-SEARCH: 707/3, 707/10, 707/104, 340/995, 340/988, 701/200, 701/208, 701/209, 701/211, 708/110, 709/203, 709/219

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5032989	July 1991	Tornetta	364/401
☐	5504482	April 1996	Schreder	340/995
☐	5613055	March 1997	Shimoura et al.	395/173
☐	5765123	June 1998	Nimura et al.	701/288
☐	5771280	June 1998	Johnson	379/93.23
☐	5784059	July 1998	Morimoto et al.	345/353
☐	5802492	September 1998	Delorne	701/200
☐	5848373	December 1998	DeLorme et al.	701/200
☐	5852810	December 1998	Sotiroff et al.	705/27

OTHER PUBLICATIONS

Any Who Directory Service, , three pages, date unknown.
Maps On Us, , 1 page, date unknown.

Kaplan et al. "Understanding [redacted]PS principles and applications" Journal of Electronic Defense, pp. 81-86, Jan. 1997.
Lee "A mode less traveled" Forbes, pp. 110-110, Feb. 1997.
Anonymous "MapQuest partners with WebCrawlwer, announces alliances" Information Today, pp. 38-40, Feb. 1997.

ART-UNIT: 277

PRIMARY-EXAMINER: Kulik; Paul V.

ABSTRACT:

A personal information manager computer program for storing names, addresses, telephone numbers and the like for personal and business contacts includes a capability for delivering geographic information in response to user requests. The personal information manager provides a display which includes one or more fields for entering or selecting contact information. The display also includes a number of buttons for requesting different types of geographic information, such as maps, directions, weather and yellow pages information. When the user clicks on one of the buttons, the personal information manager utilizes an address or other location identifier associated with the contact name to format a request to a geographic information server. The server uses the location identifier to retrieve the appropriate geographic information for that location, and sends the information to the personal information manager for display.

37 Claims, 7 Drawing figures

WEST

Generate Collection Print

L9: Entry 9 of 51 File: USPT Nov 5, 2002

US-PAT-NO: 6477526
DOCUMENT-IDENTIFIER: US 6477526 B2

TITLE: System for and method of providing map information

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hayashi; Giichi	Tokyo-to			JP
Nakano; Toshiaki	Tokyo-to			JP

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Increment P Corporation	Tokyo-to			JP	03
Pioneer Electronic Corporation	Tokyo-to			JP	03

APPL-NO: 09/ 289525 [PALM]
DATE FILED: April 9, 1999

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
JP	10-102512	April 14, 1998

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/4; 707/100, 707/102, 707/104.1, 707/200, 701/200, 701/208
US-CL-CURRENT: 707/4; 701/200, 701/208, 707/100, 707/102, 707/104.1, 707/200

FIELD-OF-SEARCH: 340/990, 340/995, 701/201-202, 701/206, 701/208, 701/209-211, 701/200, 707/100, 707/200, 707/10, 707/104, 707/4, 707/104.1, 707/102, 711/157, 711/173, 709/217-219

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5345388	September 1994	Kashiwazaki	340/988
☐	5543789	August 1996	Behr et al.	340/995
☐	5671408	September 1997	McBride	379/112.06
☐	5682525	October 1997	Bouve et al.	707/104
☐	5739772	April 1998	Nanba et al.	340/988
☐	5758313	May 1998	Shah et al.	701/205
☐	5802492	September 1998	DeLorme et al.	340/990
☐	5848373	December 1998	DeLorme et al.	701/200
☐	5944769	August 1999	Musk et al.	701/201
☐	5948040	September 1999	Delorme et al.	701/201
☐	6038569	March 2000	Ashby et al.	701/201
☐	6073076	June 2000	Crowley et al.	701/208
☐	6081803	June 2000	Ashby et al.	340/990
☐	6092076	July 2000	McDonough et al.	345/866
☐	6104316	August 2000	Behr et al.	340/995
☐	6107944	August 2000	Behr et al.	340/995
☐	6112200	August 2000	Livshutz et al.	707/4
☐	6282489	August 2001	Bellesfield et al.	701/201
☐	6292743	September 2001	Pu et al.	455/456
☐	6336111	January 2002	Ashby et al.	701/208

OTHER PUBLICATIONS

Bedetti, A. et al., "The GSI road management integrated software package", Conference Record on Vehicle Navigation and Information Systems Conference, Sep. 11-13, 1989, pp. A22-A27.*
Tsuzawa, M. et al., "Advanced Mobile Traffic Information and Communication System--AMTICS", IEEE--Vehicle Navigation and Information Systems Conference, Sep. 11-13, 1989, pp. 475-483.*
Tsuzawa, M. et al., "Advanced Mobile Traffic Information and Communication System--AMTICS," Vehicle Navigation and Information Systems Conference, Sep. 11-13, 1989, pp. 475-483.

ART-UNIT: 2172

PRIMARY-EXAMINER: Corrielus; Jean M.

ASSISTANT-EXAMINER: Alam; Shahid

ABSTRACT:

The route calculation server receives starting point data and destination data corresponding to a starting point and a destination which a user designates by the user terminal, and calculates a route from the starting point to the destination. The map server includes a map database, and communicates with the user terminal via the network. The route calculation server stores calculated route data together with route identification information associated with the route data, and transmits the route identification information to the user terminal via the network. The map server receives the route identification information from the user terminal via the network, obtains the route data associated with the route identification information from the route calculation server, produces route display picture data including map picture on which the calculated route is represented, and transmits the route display picture data to the user terminal.

10 Claims, 9 Drawing figures

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Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 5543789 A

L11: Entry 1 of 1 File: USPT Aug 6, 1996

US-PAT-NO: 5543789
DOCUMENT-IDENTIFIER: US 5543789 A

TITLE: Computerized navigation system

DATE-ISSUED: August 6, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Behr; David A.	Roselle	IL		
Jones; Randall B.	Downers Grove	IL		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Shields Enterprises, Inc.	Chicago	IL			02

APPL-NO: 08/ 265094
DATE FILED: June 24, 1994

INT-CL: [06] G08 G 1/123

US-CL-ISSUED: 340/995; 340/990, 340/991, 364/449
US-CL-CURRENT: 340/995; 340/990, 340/991, 701/207

FIELD-OF-SEARCH: 340/988, 340/990, 340/995, 340/991, 364/449

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4311876	January 1982	Endo et al.	455/54.1
4466125	August 1984	Kanayama	340/990
4951212	August 1990	Kurihara et al.	340/995
4954958	September 1990	Savage et al.	364/444
5172321	December 1992	Ghaem et al.	364/444
5243528	September 1993	Lefebvre	340/995
5262775	November 1993	Tamai et al.	340/995
5283575	February 1994	Kao et al.	340/990
5291412	March 1994	Tamai et al.	364/449
5291413	March 1994	Tamai et al.	364/449
5293163	March 1994	Kakihara et al.	340/988
5293484	March 1994	Dabbs, III et al.	340/825.44

OTHER PUBLICATIONS

Smart cars, smart highways, collier, w. Clay and Weiland, Richard J., IEEE Spectrum, Apr., 1994, pp. 27-33.

ART-UNIT: 267

PRIMARY-EXAMINER: Swarthout, [redacted]rent A.

ABSTRACT:

The invention provides a method and system for providing route guidance information from a base unit to a remote unit in response to a request from the remote unit. The remote unit may be a mobile unit or a fixed unit. A query is formatted at the remote unit, the query including the request, and communicated from the remote unit to the base unit. The requested route guidance information is calculated at the base unit in response to the query, using a database located at the base unit. A response to the query is formatted at the base unit, the response including the route guidance information. The response is communicated from the base unit to the remote unit for display.

56 Claims, 4 Drawing figures

Full | Title [redacted] CLS.1 REF.1 SEQ.1 ATT.1 [redacted]

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Terms	Documents
5543789.pn.	1

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Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 5944769 A

L16: Entry 1 of 1 File: USPT Aug 31, 1999

US-PAT-NO: 5944769
DOCUMENT-IDENTIFIER: US 5944769 A

TITLE: Interactive network directory service with integrated maps and directions

DATE-ISSUED: August 31, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Musk; Elon	Mountain View	CA		
Fitzgerald, II; Maurice J.	San Bruno	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Zip2 Corporation	Mountain View	CA			02

APPL-NO: 08/ 745868
DATE FILED: November 8, 1996

INT-CL: [06] G06 F 13/38, G06 F 17/30, G01 C 21/00

US-CL-ISSUED: 701/201; 395/200.47, 395/200.49
US-CL-CURRENT: 701/201; 709/217, 709/219

FIELD-OF-SEARCH: 701/201, 701/208, 701/209, 701/211, 340/995, 340/990, 340/993, 395/200.47, 395/200.49

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5428546	June 1995	Shah et al.	364/449
5543789	August 1996	Behr et al.	340/995
5559707	September 1996	Delorme et al.	364/443
5682525	October 1997	Bouve et al.	395/615
5737533	April 1998	De Hond	395/200.49
5802492	September 1998	Delorme et al.	701/200

OTHER PUBLICATIONS

Mapquest Website; Geosystems Global Corporation; Copyright 1996-1998.

ART-UNIT: 361

PRIMARY-EXAMINER: Zanelli; Michael J.

ABSTRACT:

The present invention provides a network accessible service which integrates both a business directory and a map database. A user can search the business directory in a

variety of methods, including using aspects of the map database (i.e., a radius) to quantify the search. The user can then obtain directions from a specified user location to a selected search result. All of this is conveniently accomplished through a single website access.

12 Claims, 8 Drawing figures

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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Terms	Documents
5944769.pn.	1

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L9: Entry 37 of 51 File: USPT Mar 13, 2001

US-PAT-NO: 6202065
DOCUMENT-IDENTIFIER: US 6202065 B1

TITLE: Information search and retrieval with geographical coordinates

DATE-ISSUED: March 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wills; Kenneth	Grapevine	TX		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Travelocity.com LP	Fort Worth	TX			02

APPL-NO: 09/ 226196 [PALM]
DATE FILED: January 7, 1999

PARENT-CASE:
This is a continuation of application Ser. No. 08/887,471, filed Jul. 2, 1997, now U.S. Pat. No. 5,893,093, and incorporated herein by reference.

INT-CL: [07] G06 F 17/30

US-CL-ISSUED: 707/5; 707/501, 348/239
US-CL-CURRENT: 707/5; 348/239, 715/501.1

FIELD-OF-SEARCH: 707/3, 707/4, 707/5, 707/501, 707/514, 707/104, 707/10, 707/101, 707/102, 707/205, 701/216, 701/208, 701/200, 701/201, 701/202, 701/148, 348/148, 348/239, 235/494

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5231584	July 1993	Nimura et al.	701/202
☐	5241671	August 1993	Reed et al.	707/104
☐	5267042	November 1993	Tsuchiya et al.	348/239
☐	5329108	July 1994	Lamoure	235/494
☐	5471392	November 1995	Yamashita	701/200
☐	5475598	December 1995	Fushimi et al.	701/202
☐	5517419	May 1996	Lanckton et al.	701/216
☐	5543788	August 1996	Mikuni	340/990
☐	5544061	August 1996	Morimoto et al.	701/202
☐	5559707	September 1996	DeLorme et al.	701/200
☐	5596500	January 1997	Sprague	701/213
☐	5630072	May 1997	Dobbins	705/222
☐	5724571	March 1998	Woods	707/5
☐	5742297	April 1998	Logan	345/436
☐	5848373	December 1998	DeLorme et al.	701/201
☐	5893093	April 1999	Wills	707/5
☐	5930474	July 1999	Dunworth et al.	707/10

ART-UNIT: 279

PRIMARY-EXAMINER: Amsbury; Wayne

ASSISTANT-EXAMINER: Havan; Thu- Thao

ABSTRACT:

An information search and retrieval process using geographical coordinates. An index of coordinates is built for a plurality of text based references, resources or sites, each having a set of said coordinates. A user inquiry is accepted containing a text reference. The text reference specified in the user inquiry is converted to a set of coordinates. A search is thereafter conducted against the index of coordinates based on the converted coordinates of the user inquiry reference. All information retrieved from the search is returned in a text based format.

33 Claims, 11 Drawing figures

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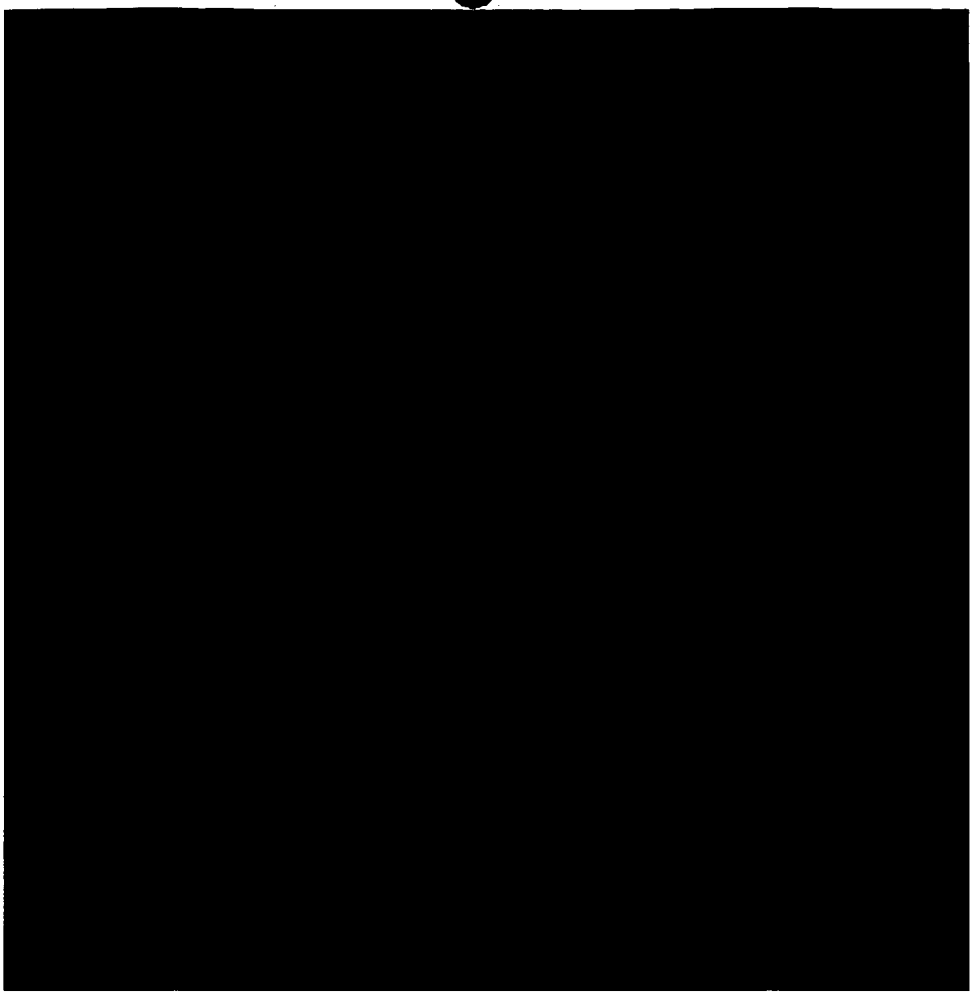

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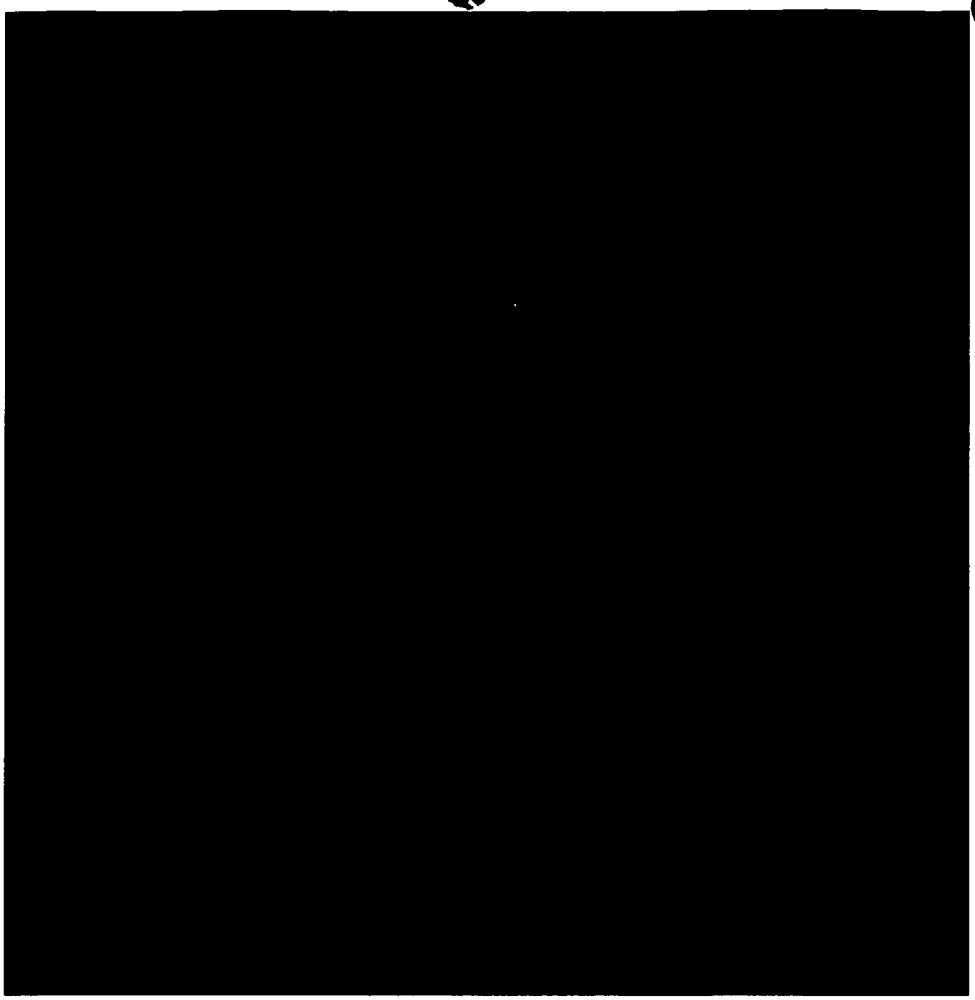

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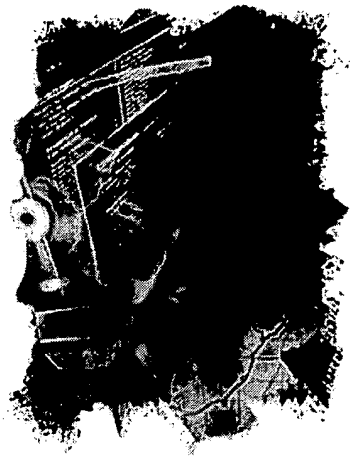

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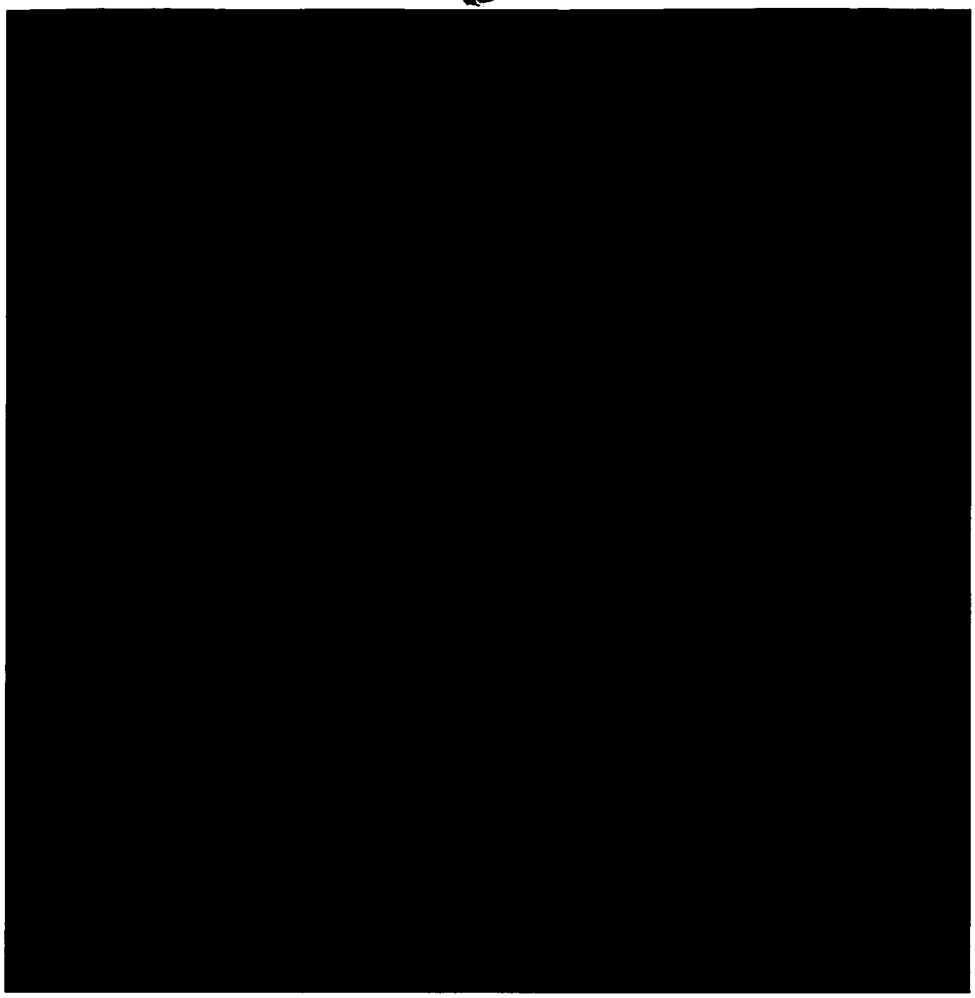

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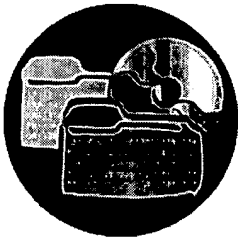
Data Management Services

Can you identify with these provider database challenges?



- Inaccurate, inconsistent data and formats
- Duplicate records
- Data from numerous sources
- Large databases

If so, you're probably spending too much time and money trying to manage these complex data issues.

GeoAccess' data management services consultants can take your data management challenges off your hands – saving you money and enabling you to direct your internal resources to other priorities. What makes our data management services unique is the personal attention our consultants give your data. Working in close partnership with you, we fully customize our data cleaning and data management services to meet your specific business needs.

Data management services are included with our SMART Directory System directories.

Our data management services include data collection, validation, cleaning and distribution.

1 DATA COLLECTION

One of the most challenging tasks in managing data is collecting it from multiple sources. Our consultants will collect data from your data sources and coordinate with them to regularly submit this data electronically. We will then merge this data into a global database developed to your specifications, regardless of original file formats.

2 DATA VALIDATION

Once data is collected, it's crucial to verify that it's complete before data cleaning takes place. GeoAccess consultants provide all data contacts with reconciliation reports for their review and approval. We also highlight any abnormalities when compared with previous data submissions and work with the data contact to reconcile differences.

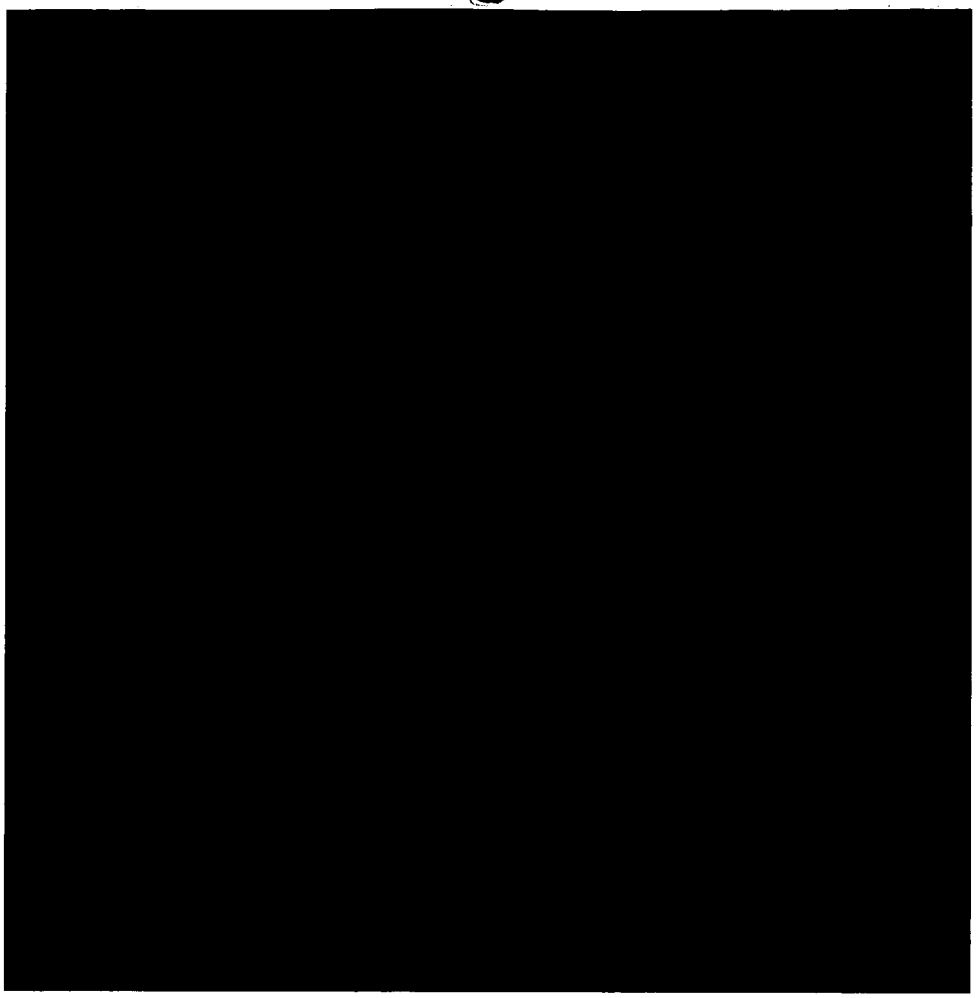
3 DATA CLEANING

GeoAccess puts your data through a rigorous cleaning process that's customized for your organization. Our consultants draw on our extensive experience and exclusive data-cleaning methods to give you the best possible results. This personalized approach provides a level of data cleaning that's unparalleled.

4 DATA DISTRIBUTION

Because we identify the intended uses of your provider data early in the data management process, GeoAccess can return your data in appropriately optimized formats. We also coordinate a data distribution process to best meet your needs – whether automatically on a regular basis or by individual request.

BACK TO TOP



go to Communications | more about SMART Directory System

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GeoAccess

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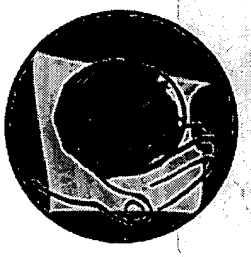
SMART Directory System

DirectoriesOnline

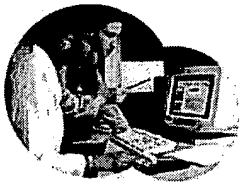


- Introduction
- Benefits
- Directory Features
- Technical Features

Start Demo GO

Introduction

Save Money and Enhance Sales Efforts With Customized,Online Directories



Imagine never having to distribute another large, expensive provider directory to your broker customers again. Instead, you empower them to "serve themselves" to up-to-date directory information via the World Wide Web.

With our SMART DirectoriesOnline service, your brokers and sales representatives can generate and publish client or market-specific provider directories on-the-fly via a secured link on your Internet site. This gives your sales force the ability to produce directories at their convenience that meet the specific needs of their individual or corporate clients.

DirectoriesOnline also provides a tremendous, value-added service for your group clients - offering them the ability to publish and distribute up-to-date provider directories specifically for their employees during open enrollment or whenever a need arises.

Part of our SMART Directory System, DirectoriesOnline offers self-service customization - enhancing your sales efforts and customer service while saving you time and money spent creating traditional directories. Tailored to closely resemble traditional printed books, DirectoriesOnline can generate directories that are personalized and concise - or more complete.

Benefits

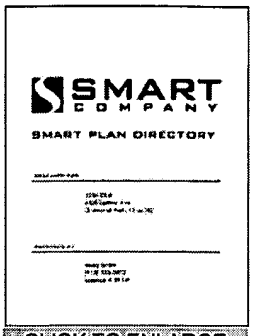
- **Information on demand** – Your sales force can create customized directories on-demand, 24 hours a day, seven days a week.
- **Slash administrative costs** – Self-service directories will significantly reduce the need to produce, distribute and store expensive traditional directories for your brokers and group clients.
- **Client-specific directories** – While online, your sales force can customize directory requests to include only the region, network or provider classes relevant to their client. Your employer clients can also generate fresh directories on-demand for their employees.
- **Data-fresh directories** – Present your prospects and clients with current network information. Our SMART experts collect provider data from your data sources each month, then apply our state-of-the-art data cleaning technologies.
- **Seamless integration** – DirectoriesOnline incorporates your graphics and logo to seamlessly integrate with your existing Web site.
- **Our infrastructure** – DirectoriesOnline runs on GeoAccess Internet servers, so there's no additional hardware, software or staffing investment on your part.
- **A competitive edge** – DirectoriesOnline equips your sales force with a revolutionary directory-generation tool that distinguishes them - and your organization - from the competition.
- **Flexible distribution** – Shift or eliminate printing and distribution costs. After downloading the directory image, a sales rep can print the directory or simply provide the client with the directory file.

Directory Features

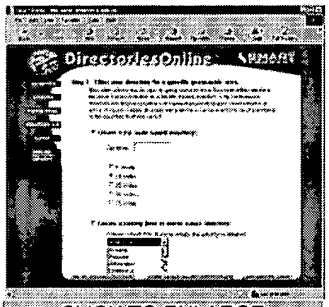
DirectoriesOnline offers a variety of SMART standard features. We also can provide a customized solution, tailoring the features of your DirectoriesOnline site to meet your specific business needs.

Directory Publishing Templates – DirectoriesOnline templates are formatted like standard printed directories but include dynamically generated content. SMART standard features include:

- Page layout, including logo and graphics
- Front and back cover pages
- Front matter
- Front matter in a second language
- Multiple sorts
- Indexes



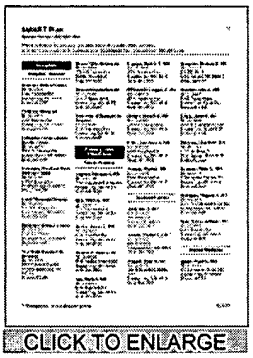
CLICK TO ENLARGE


CLICK TO ENLARGE

Flexible Directory Criteria – Provide flexible search and sort options for your online directories. With our SMART standard features, your sales staff and group clients can build directories with these choices:

- Network
- Provider types
- Region, county or zip codes
- Specialties

Fantastic Results – Your online directories closely mirror traditional directories - but are tailored specifically for your clients. After downloading the directory image, individuals can print the directory or simply provide the customer with a directory file.


CLICK TO ENLARGE

Technical Features

Security and high-volume capacity

- Secure your directory-creation site through a secured gateway on your site or using our security model.
- Load-balancing routes traffic between mirrored servers.
- A firewall protects your data.
- Redundant T1 lines ensure continuous availability.

Customized, high-speed searches

- Proprietary indexing technology delivers high-speed searches.
- Search and criteria are customized to your provider data.
- Monthly updates refresh system data.

Dedicated support

- Monthly reports summarize activity on your site.
- 24-hour support hotline keeps you in touch with our technicians.
- Fully monitored systems guarantee performance.

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GeoAccess
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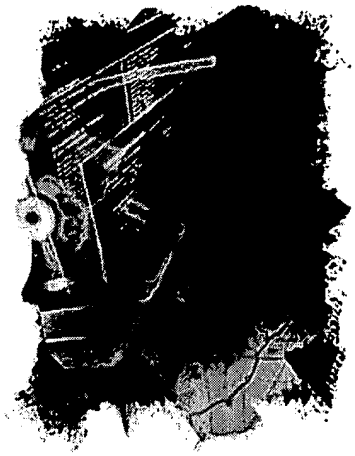
GeoAccess Solutions

GeoAccess is a software and consulting firm that enables companies to effectively analyze and communicate network provider information. Our solutions – from Internet technologies to software applications to outsourcing services – help companies cut costs, improve efficiency and provide value-added services to network members and employees.



- Communications solutions
- Accessibility analysis solutions
- Data management solutions

OUR COMMITMENT TO TECHNOLOGY

GeoAccess' Internet services division is one of the fastest growing areas of the company. We work with the most current technologies including Active Server Pages (ASP), VBScript, MS SQL Server, ActiveX controls, database modeling and more.

GeoAccess developers are top-of-the-line software engineers who produce, update and enhance our software programs. We develop 32-bit Windows applications using technologies including Visual C++, MFC, ActiveX (ATL/COM) and ODBC/SQL. Our focus on object-oriented design and code reusability enables us to leverage technologies across multiple products and services.

Communication Solutions

SMART Directory System

MORE ABOUT communications

Simple, Member-focused, Accurate, Relevant and Timely, our SMART Directory System is a turnkey solution that leverages state-of-the-art technologies based on widely accepted best-practice standards for communicating network information. Incorporating a spectrum of communication vehicles, including the Internet/intranet, interactive voice response (IVR), fax, e-mail and regular mail, SMART directories facilitate on-demand service and accommodate a wide range of preferences for accessing provider information. MORE ▶

ProviderSearch API

The first module of the GeoAccess API PowerPack, ProviderSearch API makes it possible to easily integrate a

searchable directory of healthcare providers into any Web site or Web-enabled application. ProviderSearch API delivers the same sophisticated search technologies that power hundreds of online provider directories for GeoAccess clients. An easy-to-use Application Program Interface, ProviderSearch API can search a client's own database of healthcare providers or the national provider database maintained by GeoAccess, which includes health plan affiliations. MORE ▶

ProviderList
Using our unique distance measuring technology, ProviderList empowers health plans and employers to create timely, relevant and personalized lists of providers for their members. ProviderList matches providers to each member based on distance and other information (such as specialties, facilities, etc.) and generates a listing of personalized providers for each member, which you and your printer choose how to format and package – as simple personalized directories or as part of personalized enrollment kits. MORE ▶

SMART Directory System
ProviderLookup Online
With ProviderLookup Online, health plan members can search for convenient providers, view maps and driving directions to provider locations, download a personalized directory and link to a library of consumer health information. MORE ▶

SMART Directory System
DirectoriesOnline
This service empowers individuals to publish client or market-specific provider directories on-the-fly via the Internet. MORE ▶

SMART Directory System
DirectoriesIVR
Using only a telephone, this 24-hour interactive voice response service enables members and employees to request a personalized provider list that can be delivered in minutes by fax or sent by mail. MORE ▶

SMART Directory System
Directories ByMail
With our Directories ByMail service, you can distribute personalized provider directories to your health plan members. Because they're smaller and easily produced and distributed, these directories are less costly and more up-to-date than traditional books. MORE ▶

Call Center Software
Our Referral call center software enables hotline representatives to instantly identify network providers who meet desired criteria and are located closest to callers. MORE ▶

Directory Software
Our powerful database publishing software, DirectoryExpert®, creates provider directories by combining desktop publishing and distance-calculation technologies. MORE ▶

Workers' Compensation Job-Site Postings
We create accurate and easy-to-use communications for

workers' compensation companies – including wall cards, panel cards and other job-site postings. MORE ▶

Accessibility Analysis Solutions

GeoNetworks Software and Outsourcing Services

GeoNetworks® is widely regarded as the industry-standard software for analyzing and communicating the accessibility of managed care networks. GeoNetworks produces presentation-quality maps, graphs and tabular reports that help companies succeed in the development, marketing and selection of healthcare networks. For our clients' outsourcing needs, GeoAccess consultants produce detailed network accessibility analysis reports using our industry standard technology. MORE ▶

Network Disruption Analysis

When managed care networks change, some enrolled members will experience a disruption in their provider relationships. Disruption occurs when an individual's provider is not available in the new or proposed network, and the member or employee is forced to select a new provider. GeoAccess consultants create sophisticated reports that identify network provider overlap and show disruption to members or employees. MORE ▶

Data Management Solutions

Data Management Services

Our team of consultants provides comprehensive data management services – from data collection to cleaning to distribution. Using our state-of-the-art technologies, we optimize data for use with GeoAccess software and other systems. MORE ▶

DataCleaner™

This software application features a powerful combination of data-cleaning features, including removal of duplicate records and address standardization to U.S. Postal Service or custom specifications. MORE ▶

GeoCoder

Our GeoCoder software assigns geographic coordinates – longitude and latitude – to street addresses, providing the most precise analysis of member or employee access to network providers. MORE ▶

ProviderMatch

With this software application, managed care organizations can automate the process of matching members with network providers. MORE ▶

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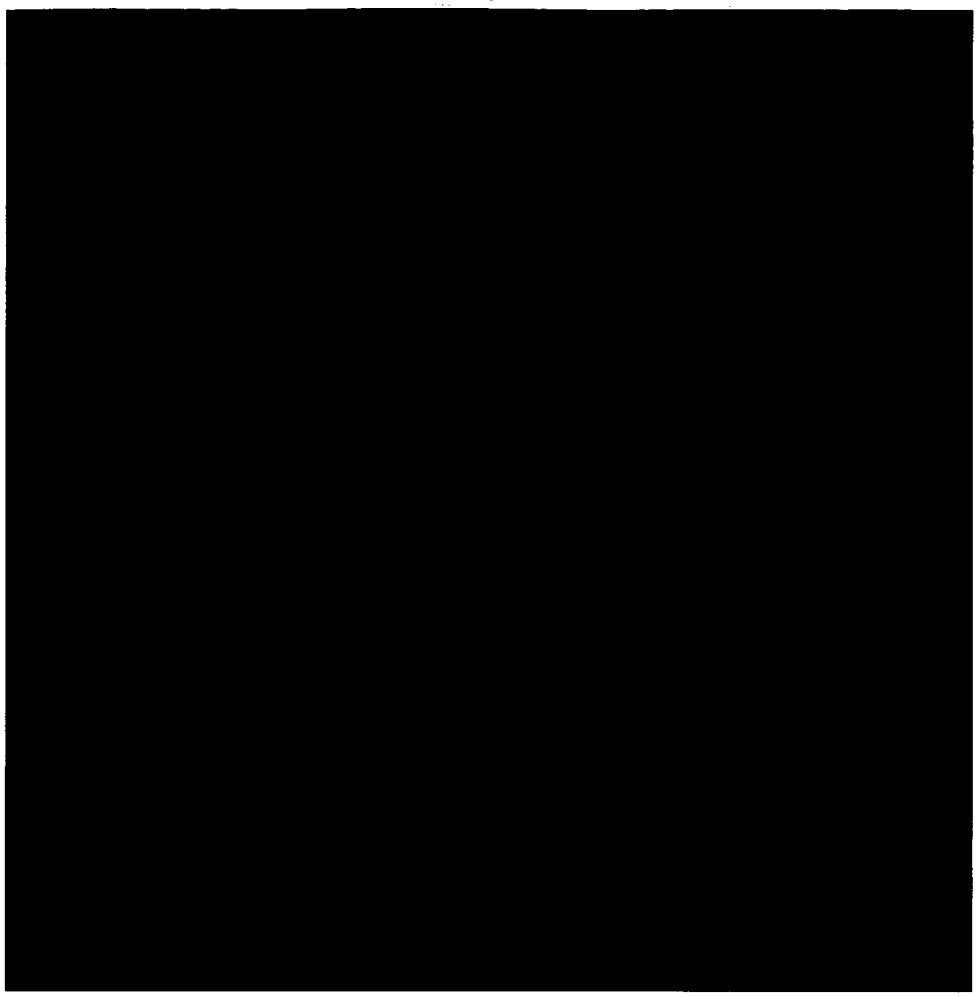
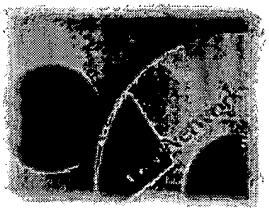


Our History
Corporate Culture
Our Solutions
Careers at GeoAccess

Our History

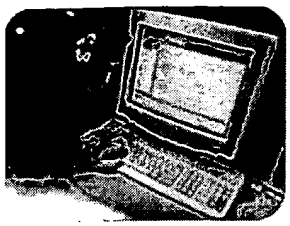


GeoAccess has remained focused on the managed healthcare industry since healthcare consultants Thomas Lauerman and Stuart Bauman founded the company in 1990. Today, GeoAccess provides a suite of enterprise-wide solutions for managed care accessibility, communication and data management issues. Our flagship product – GeoNetworks® – is widely regarded as the industry-standard tool for analyzing and communicating member and employee access to network providers.

The cutting-edge technology that launched GeoNetworks has given way to a whole suite of software products, outsourcing services and Internet technologies that help companies cut costs, improve efficiency and provide value-added services to network members and employees. Our precise distance-calculation technology helps clients develop, evaluate and market their healthcare networks, and furnish their members with better provider information via call centers, provider directories and the Internet. GeoAccess also offers unparalleled data management services to ensure our clients' provider data is cleaned, standardized and optimized for use.

Today, GeoAccess solutions are used by more than 800 managed care organizations, employers, healthcare consulting firms and government agencies in the United States. Long-term plans include expanding our solutions internationally.

Corporate Culture



GeoAccess strives to employ intelligent, productive people. Our employees give consistent, high-level performance, possessing not only technical expertise but also excellent communication skills and the ability to grasp leading-edge concepts quickly.

While expectations are high at GeoAccess, we offer an appealing work environment. Convinced that layers inhibit productivity and creativity, partners Tom Lauerman and Stu Bauman have maintained a relatively flat organizational structure. Status symbols such as titles, private offices and tiered benefits are not part of our environment. This helps employees focus their attention on our customers.

Employees eat free lunch together, everyone is on a first-name basis and dress is casual. Our goal is to hire people who produce results without strict guidelines regarding work hours.

HAVING FUN IS IMPORTANT TO US

All work and no play makes for a dull group. That's why GeoAccess maintains an active social calendar for employees. Monthly socials, holiday parties and semi-annual company meetings give employees the opportunity to spend time together outside of the office. In addition, GeoAccess supports the health and well being of its employees by sponsoring company teams for sporting events such as softball, volleyball, bowling and golf. We also participate in the annual Kansas City Corporate Challenge tournament.

GeoAccess is a challenging and rewarding place to work. Our unique environment is highly productive – yet casual, innovative and fun. Our approach to work fosters pride in the company and good morale. We believe that our excellent products and services – and list of satisfied customers – are a direct reflection of this approach and the people we employ.

Careers at GeoAccess

When you work for GeoAccess, you'll be challenged each day to help provide comprehensive, strategic solutions for our clients. You'll work with the latest Windows technologies to develop desktop and Internet applications that will help our customers succeed in the competitive managed healthcare environment.

More about careers at GeoAccess About GeoAccess benefits

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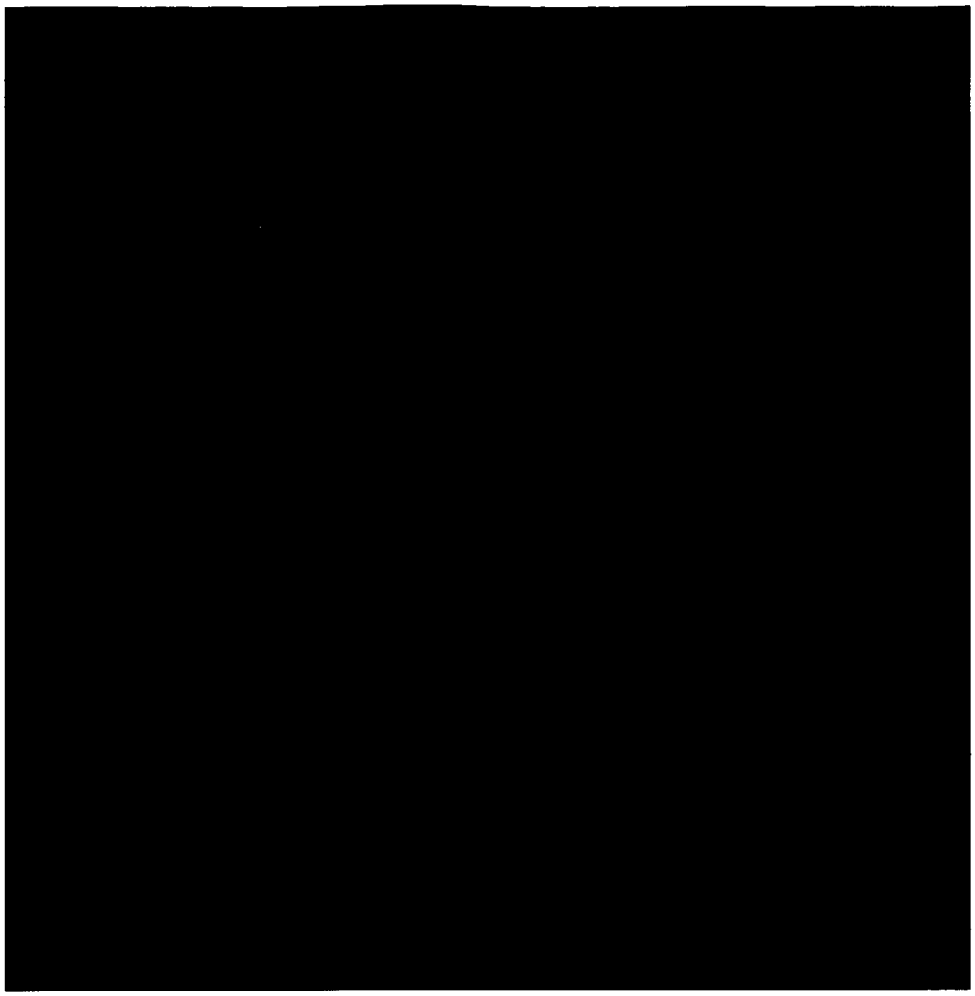

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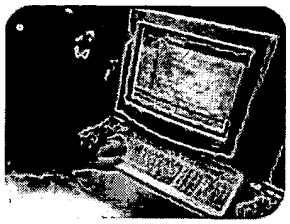

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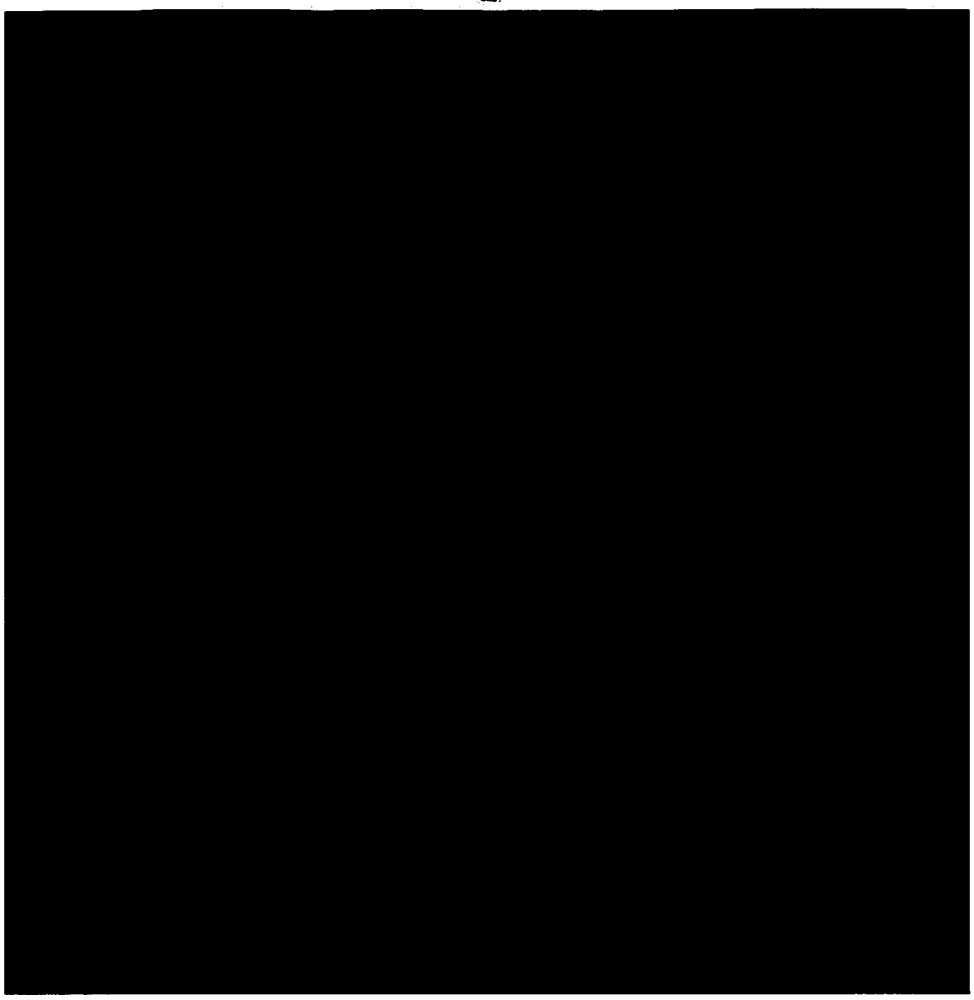

Effective Strategies for Communicating Provider Information

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SMART Directory System

What's New
- Quality Ratings Suite
- DisruptionAnalysis™
- Access2003

GeoAccess
An Company

Accessibility Analysis | Data Management

solutions

Credentialing | Communications

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PlanetGeo
An exclusive website for GeoAccess licensed software customers.
ENTER

GeoAccess merges with Ingenix

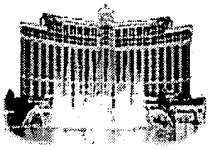
On June 3, 2002 GeoAccess became a subsidiary of Ingenix Health Intelligence, one of the industry's largest health information companies. Sharing a vision for applying technology to healthcare data issues, GeoAccess and Ingenix can now leverage the combined organization to accelerate the pursuit of this vision.

You can learn more about Ingenix at www.ingenix.com.

About GeoAccess

GeoAccess is a data-centric technology company focused exclusively on helping healthcare plans, providers and purchasers manage, analyze and communicate provider and network information. The company provides software and services to more than

Access2003 integrates with Ingenix Summit



The 9th Annual GeoAccess Customer Conference will become a part of the most powerful health intelligence summit in the industry – the **2003 Ingenix Health Care Information Summit** at The Bellagio in Las Vegas, May 4-7.

The best elements of past GeoAccess customer conferences will be blended with the exciting event that Ingenix has created. You'll find the GeoAccess educational sessions you've come to expect combined with Ingenix educational sessions, first-rate speakers, and the Innovation Center – where you can interact with individuals and products from across the many Ingenix divisions.

The purchasing power of Ingenix has allowed us to offer you a reduced conference registration fee as well as attractive room rates at this world-class hotel. Mark your calendars and make sure that you attend this fantastic event!

- REGISTRATION
- MORE INFORMATION

[redacted]

services to more than 1,000 clients including healthcare organizations, government agencies, large employers, e-health companies and benefits consulting firms.

- MORE ABOUT GEOACCESS

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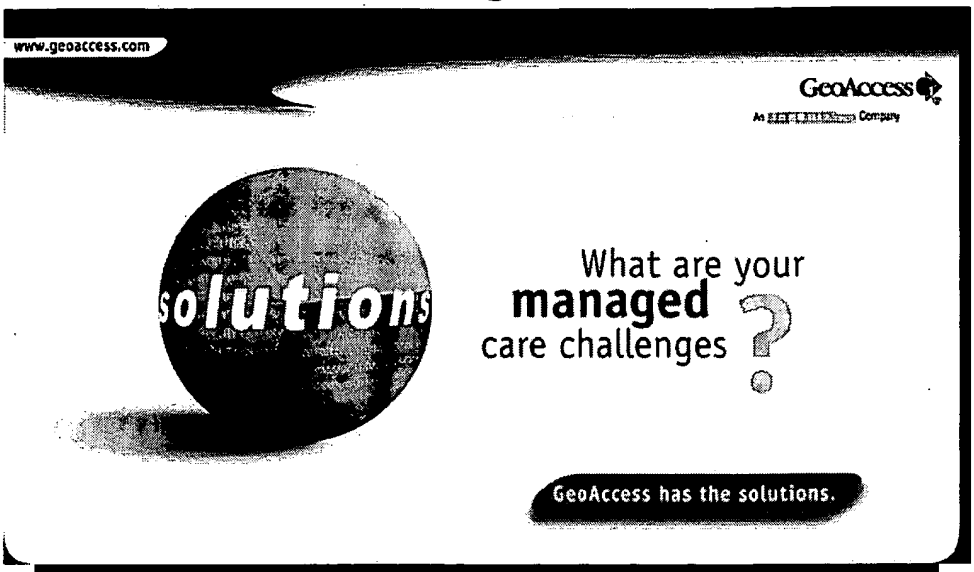
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An Company
solutions
What are your
managed
care challenges ?
GeoAccess has the solutions.

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MapQuest for your website Help

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City:

State: Zip Code:

Get Map

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Maps On Us User's Manual

Maps On Us is a map & routing server for the Web. Here are links to various pages related to Maps On Us.

Documentation

- **User's Manual** (below)
- **FAQ** Frequently Asked Questions
- **Directed Map Drawing**, to create your own *Draw Map* ... URLs
- **Directed Route Planning**, to create your own *Directions To* ... URLs

Running Maps On Us

- **Sign-On** as a registered user
- **Draw A Map** as a unregistered user
- **Plan A Route**
- **Search The Yellow Pages**

User's Manual: Table Of Contents

- Basics
  - Why Does a Web Page Need A User's Manual?
  - How To Start Maps On Us
  - Requirements
  - Related Stuff
  - Disclaimer
- Registered vs Unregistered Users
- Maps On Us Web Pages
- Address Book
  - Named Addresses
  - Yellow Pages Listings
- Map Page
  - Key to map features
  - Clicking on the map
  - Labels As Hyperlinks
- Yellow Pages
- Planning A Route
  - Turn-By-Turn Directions
  - Intermediate Destinations
  - Using Addresses
  - Plan Route vs Best Tour
  - Routing Caveats
- Addresses
  - Partial Addresses & Addresses
  - Address Tips & Caveats
- Miscellaneous Topics
  - Bookmarking Pages
  - Linking To Specific Map Pages

- Error Messages
- Latitude And Longitude
- Map Projection
- Be Kind To Your Browser
- Monitor Resolution

Basics

Maps On Us (http://MapsOnUs.switchboard.com) is a web server that provides integrated access to maps, routes, and yellow pages. For example, you can

- draw a map of your home,
- find theaters in another town,
- plan a route from your home to that theater,
- find restaurants along that route, and
- replan the route via one of those restaurant.

The maps & routes are fully interactive and customizable. For users who register, we keep a profile of preferences and favorite locations.

The Maps On Us pages are dynamic, not static: they change every time you do something. They are customized for each user, and are generated on-the-fly by CGI scripts.

For example, suppose you start on the Maps On Us Map page with a detailed map of your home. You might then search the Yellow Pages database for book stores within 10 miles of home, and ask us to redraw and rescale the map to show the book stores that it found. When you came back to the Map page, the map image would be different.

Why Does a Web Page Need A User's Manual?

We need a User's Manual because this web ``page'' is really a *GUI* (Graphical User Interface) to a geographic database. If we put a lot of explanatory text on those Web pages, it would obscure the information you're looking for. So we've moved a lot of the explanations out of the pages and into this User's Manual.

How To Start Maps On Us

To use Maps On Us, click on

SIGN-ON TO MAPS ON US

Then enter your name and the other information, and follow the links from there.

Requirements

To use Maps On Us, you need:

- A browser that supports *FORMS*.
- A browser that supports graphic images (GIF files).

The following are recommended but not required:

- A color monitor, preferably at least 8-bit color. The maps use color to indicate different road types;

for examples, see the map feature key later in this manual. If you don't have a color monitor, we can draw maps in black and white, but they won't look as nice.

Related Stuff

- For questions or comments, please see our FAQ page.

Disclaimer

Our goal is to investigate ways to search and present maps and other geographic data, not to create the data itself. We purchased the map data from an outside vendor (Tele Atlas, Inc.). While that data is generally very good, there are some errors and omissions. Furthermore, the map data is in a proprietary format, and we can't do very much to fix the errors.

The bottom line: **Use these directions at your own risk. If you get lost, it's not our fault!**

Registered vs Unregistered Users

You can use the system either as a registered user or as a unregistered user. The only difference is that if you register, we'll save your profile and preferences between sessions; if you're a unregistered user, we won't.

Registered Users

When you register, you must pick a user name. Names must be at least 6 characters long. Names can contain letters and numbers, plus periods (.) and dashes (-). We'll remove blanks and other punctuation. Case is significant. The user names are global, and will work from any client, so you can access your user profile from anywhere in the world.

Unregistered Users

If you don't want to register, you can sign-on as a unregistered user by giving `~new` as your user name. We'll create a user name for you (such as ~329b3aff.xyx). Just remember that unless you register, we'll delete your profile after a day or so.

Maps On Us Web Pages

Maps On Us offers several different web pages:

Sign-On / Register New User
: This is where you give your user id and password. It also points to the page for registering a new user.

Draw New Map
: This lets you enter an address for the map. If you have created named addresses or saved listings from our Yellow Pages database, you can also draw a map of one of more of those places.

Current Map
: This displays your current map, and lets you pan or zoom.

Plan New Route
: This lets you plan a route by selecting the start, end, and intermediate points.

Current Route.
: Once you've planned a route, this page gives the turn-by-turn directions and a map of the route. You can redraw the map to show details for selected turns. You can also get small thumb-nail maps for each turn.

Name Search.

Category Search.

These let you search our Yellow Pages database by category or by name. For example, you can find all Italian restaurants within 10 miles of your home, or you can find all the places with Pizza in their names.

Search Results

This shows the places that we found the last time you searched the Yellow Pages database. You can show these places on your map, plan a route to a place from home or work, etc.

My Addresses

This page lists all your named addresses, and gives links to per-address pages for creating or changing those named addresses. These pages let you specify the position of various *Addresses*, such as where you live, where you work, your current position, etc.

My Yellow Pages

This gives the Yellow Pages listings that you have saved in your address book. You can rearrange them, remove unwanted listings, control which listings are labeled on the map, etc.

Tools And Options

This set of pages let you control how the system works. For example, you can change the size of your map, or select whether distances are in miles or kilometers.

Address Book

Your user profile has a two-part address book. The first part has *named addresses*: addresses which you enter explicitly. The second part has listings that you have found in our Yellow Pages database and have saved in your address book. Many of the Maps On Us pages have a popup menu (or a scrolling list) with the entries in your address book. For example, when planning a route, you can use an entry in your address book as the start or end point. You can also draw a map centered on one of those entries, or draw a map of several address book entries, or search the Yellow Pages database for listings within 5 miles of anything in your address book.

Named Addresses

Named addresses let you enter arbitrary addresses. You have the following named addresses:

- Home,
- Work,
- Start (of route),
- End (of route),
- Addresses 1 through 9 (okay, these are numbered rather than named!).

The **My Addresses** page lists your current named addresses, and give a link to the **Set Address** page for each address. From those pages you can enter a street address, and/or change how we display that named address on the map. You can also set a named address by clicking on your map.

We use your Start and End Addresses when planning a route . We suggest that you use the Home and Work Addresses as indicated, but we don't insist on it. You can use the numbered addresses for anything you want (second office, vacation home, school, etc.). We remember these locations between sessions, and we'll draw an icon for each named address that's on your map. The icons look something like this:

In earlier versions of Maps On Us, these named addresses were called *markers*.

Yellow Pages Listings

When you search our Yellow Pages database, you can save some or all of the listings that we find to your address book. Those listings will appear after your named addresses in your address book popup menu. The **Search Results** page lets you save listings to your address book. The **My Yellow Pages** page lets you reorder your saved listings, or remove unwanting listings.

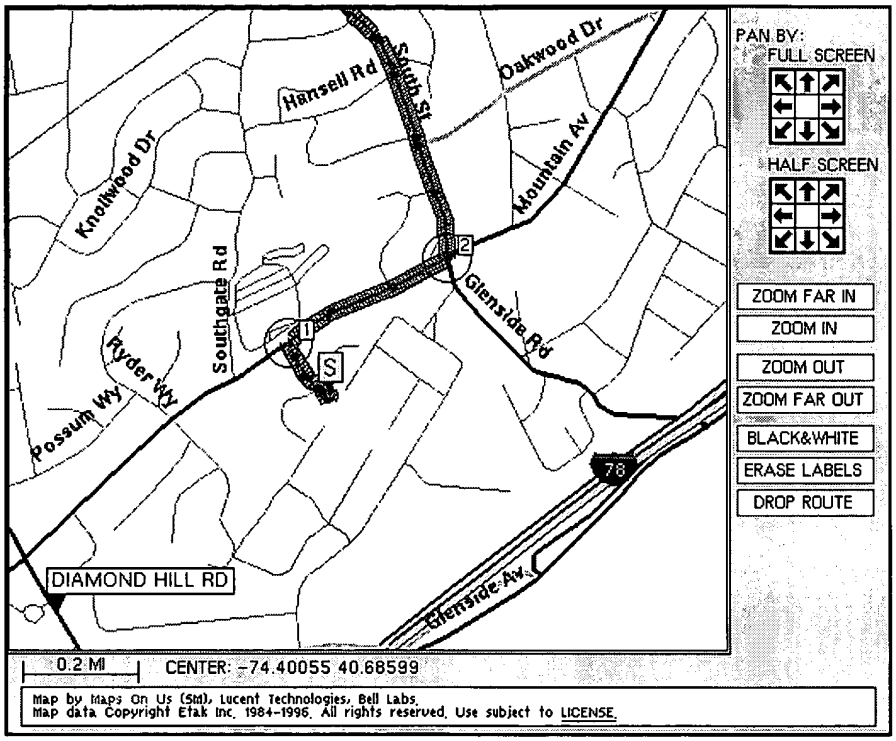
You can think of your address book as a clipboard for listings. To use listings you've found in the Yellow Pages, you first save them in your address book. Then you can go to another Maps On Us page to use those places: e.g., draw a map, plan a route, etc.

You can have at most 100 Yellow Pages listings in your address book. If you save more than that, we will automatically remove the excess listings at the end of your address book.

In earlier versions of Maps On Us, these saved listings were called your *hotlist*.

Current Map and Draw New Map Pages

The Current Map page shows your map. Here's an example:



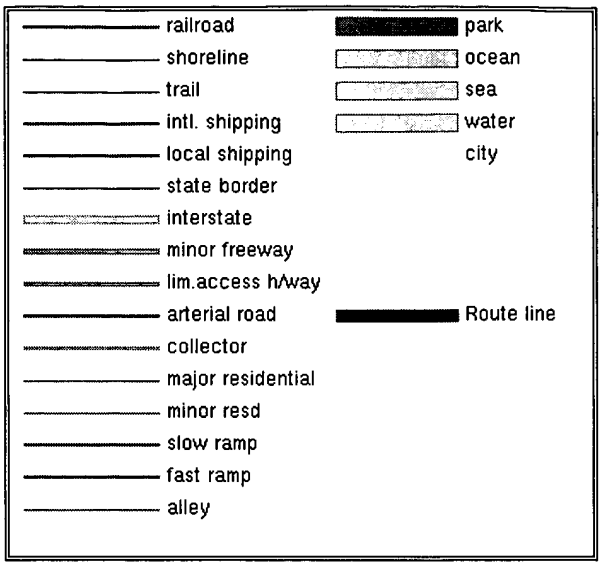
If you click on the map itself, we do whatever you've set as your map click action: zoom in, set a named address, etc. Immediately below the map are several control boxes; clicking on them pans the map, zooms it in or out, etc. **Note:** Whenever you pan or zoom, we must redraw your map and create a new GIF file. This takes a few seconds, so please be patient.

Below the map are popup menus to let you specify the map's scale and the map-click action.

The **Draw New Map** page lets you draw a map of a new address. That page also gives a scrolling list with all the entries in your address book. If you select one or more entries from that list, we will draw a map of those items. In that case, we will select the map's center and scale so that it shows all the items you selected. Note: In earlier versions of Maps On Us, and in some customized versions, these forms appear on the Map page itself (below the map), rather than on a separate page.

Map Features

We use different line colors and widths for the various road types. The types are determined by our map data vendor (Tele Atlas, Inc.). Interstates and limited access highways are fairly obvious. A *minor* residential road is an alley; any other residential road is *major*. *Arterials* and *collectors* are more important than residential roads but less important than highways. The best way to see the difference is to look at the map of a familiar area.



The level of detail depends on the map scale; as you zoom out, we hide less important roads. For example, if the scale is .2 mi/in, we show all roads. When you zoom out a few steps, we drop the residential roads. We dictate the color scheme, line width, and the amount of detail shown at each scale.

Map Click Action

You can specify what we do when you click on a point on the map itself, via the ``map-click" popup menu that follows the map. Your choices are:

- **Re-Center**: Redraw the map so it's centered where you clicked.
- **Zoom In**: Re-center the map, and then zoom in.
- **Zoom Out**: Re-center the map, and then zoom out.
- **Zoom Far In/Out**: Zoom In/Out on steroids.
- **Label Map Feature**: Label the road (or river, lake, etc.) closest to the click point.
- **Erase Label Box**: Erase a label box by clicking on it.
- **Set Address**: Put the indicated named address at the click point.
- **Show Lat/Long**: Put a latitude/longitude label at the click point (if you really want to know!).

Labels As Hyperlinks

Labels for places retrieved from our Yellow Pages database look like hyperlinks: they are blue and underlined. That's because they are hyperlinks. If you click on the label, you'll go to a page describing that place. From there, you can plan a route to that place, access its web page (if it has one), etc.

Yellow Pages

You can search our Yellow Pages database by name or by category. To search by name, you enter one or more names. To search by category, you select a primary category and a sub-category, such as *Restaurants: Italian*. For both types of searches, you also tell us where to search, such as 10 miles from your Home Address, and how to present the results. You then push the SEARCH button. If you elect to redraw the places on the map, we add all the places to your AddressBook and go to your Map Page. If you ask to see a list of the found places, we go to your **Search Results** page. This page lists each place, giving its name and address. Buttons let you sort the list by name or by distance from a point, and add selected places to your address book.

You can think of your address book as a clipboard for listings. To use listings you've found in the Yellow Pages, you first save them in your address book. Then you can go to another Maps On Us page to use those places: e.g., draw a map, plan a route, etc.

Planning A Route

The **Route Planner** page lets you select the start & end points of your route from lists of items in your address book. You can also specify the type of route: fastest route, shortest route, a route that favors major highways, etc. (No, you can't tell us to avoid a specific road yet, but we're working on it!)

Once we've planned the route, we'll set your Start Address & End Address to the end points of the route, and take you to the **Current Route** page. That page has the turn-by-turn directions plus a map. On the map, your route is shown as a wide purple line, and turns are marked with numbered, black circles. The Current Route page can also provide a small, detailed ``thumbnail" map for each cluster of turns on your route.

To plan a route involving an address, or an arbitrary spot on a map, you must first set a named address to the desired location, and then select that named address. As a short cut, the Route Planner page has a link to a page that lets you set your Start or End Addresses to an address.

As another short cut, the **Search Results** page lets you plan a route from a place in your address book to one of the places found by the search.

On the directions on the Current Route page, if you click on a turn number or on a thumbnail map, we will redraw the large map to show that turn. This a good way to get a detailed map of a complicated intersection.

Your Current Route and Current Map pages have the same map: if you change your map on one page, and then switch to the other, you will see the revised map. The Current Route page lets you change the map to show one or more turns; the Map page lets you change the map to show an address or a set of places in your address book. You can zoom and pan from either page.

Whenever we draw a map, we will always show your route if it is on the map -- even if you planned the route last week and are now looking at the Map page. To remove the route, use the DELETE ROUTE button on the map.

Turn-By-Turn Directions

Here's an example of our turn-by-turn directions:

Route Summary	
Start:	**Bell Labs, Murray Hill**, 908-582-3000, 600 Mountain Ave, Murray Hill, NJ 07974
End:	**Bell Labs, Whippany**, 201-386-3000, 67 Whippany Rd, Whippany, NJ 07981
Totals:	**11.9 miles 24 minutes 11 Turns** (Fastest Route)

Turn #	Go	And Then ...	Total Miles	Replace this column with detailed maps for all turns
Start		Head NORTH-WEST on DRIVEWAY to MOUNTAIN AV, From **Bell Labs, Murray Hill**, 908-582-3000, 600 Mountain Ave, Murray Hill, NJ 07974	0.0	
1	0.1 mi	TURN RIGHT onto MOUNTAIN AV	0.1	
2	0.3 mi	TURN LEFT onto SOUTH ST	0.4	
3	1.4 mi	CONTINUE onto PASSAIC ST	1.8	
4	0.6 mi	BEAR RIGHT onto RIVER RD	2.4	
5	0.5 mi	BEAR LEFT onto SOUTHERN BLVD	2.9	
6	0.1 mi	TURN RIGHT onto FAIRMOUNT AV	3.1	
7	1.7 mi	TURN LEFT onto MAIN ST	4.8	
8	2.2 mi	BEAR RIGHT onto PARK AV	7.0	
9	3.2 mi	BEAR RIGHT onto FORD HILL RD	10.2	
10	0.4 mi	BEAR RIGHT onto WHIPPANY RD	10.7	
11	1.1 mi	TURN RIGHT onto DRIVEWAY TO DESTINATION	11.8	
End	0.1 mi	**Bell Labs, Whippany**, 201-386-3000, 67 Whippany Rd, Whippany, NJ 07981	11.9	

WARNING: Use these directions at your own risk. Switchboard Incorporated is not responsible for their accuracy or for any losses resulting from their use. **Obey all traffic regulations**.

Here's how to interpret these directions:

- The first column is the turn number. It's also a hyperlink: click on the turn number to get a detailed (interactive) map of that turn.
- The second column gives the distance to the turn in the third column.
- The third column gives the directions for this turn:
  - "`TURN LEFT`" means make approximately a 90 degree turn.
  - "`TURN SHARPLY LEFT`" means make more than a 90 degree turn.
  - "`BEAR LEFT`" means make a slight turn.
  - "`CONTINUE`" means the road changes name, but you go straight.
  - "`FOLLOW PASSAIC AV as it TURNS LEFT`" means the road bends there, and we think the driver should know about it.
  - If the road has an alternate name, we put it in square brackets, as in "`STELTON RD [529]`" or "`HWY 18 (SOUTH) [RIVER RD]`".
- The fourth column gives the cumulative distance from the start point.
- The fifth column optionally gives a detailed thumbnail map of each turn. If several turns are close, we'll combine them on one map. To see those maps, click on the ``Show a small map of each turn'' hyperlink.

On the map, we draw a numbered circle around each turn. If several turns are very close, we'll draw one circle with the combined turn numbers (eg, ``3-5''). If you click on the number on the circle, we'll label the map with the text directions for that turn. Note: You must click in the small box that contains the number; clicking on the circle or the intersection won't work.

Intermediate Destinations

If you click on the ``Add An Intermediate Destination'' link, we add an ``Intermediate Destination'' list to the route planning page. This works just like the destination list; we plan a route from your starting

point, to your intermediate destination, and then to your final destination. You can add up to five intermediate destinations in this way.

Intermediate destinations are also useful as *guide points* to force us to pick a particular route. For example, the default route from Holmdel to Murray Hill goes through local roads in Westfield. But suppose you want to force us to take the Garden State Parkway north to I-78. To do that, put a numbered address (say Address 1) on the Parkway, shortly before the exit for I-78, and then use that as an intermediate destination. Note: The route *will* go through the road that is *closest* to Address 1, so be sure to put the point on the Parkway, and not on a nearby local road. Furthermore, be sure to put it on the *northbound* lane of the Parkway.

Using Addresses

To use an address as a point on a route, you must set a named address to that address, and then select that entry from the list in the route planning page. To make it easier to enter addresses, the route planning page has several ``Enter Address'' buttons. These take you to a simplified address entry page, and return you to the route planning page when done. For the start and end, these set your Start and End Addresses. For intermediate points 1-5, these set your numbered addresses 1-5.

Plan Route vs Best Tour

The ``Plan Route'' button plans the route. If you have intermediate points, it will use those points in the order you've specified.

If you have intermediate points, then we also offer a ``Best Tour'' button. This also plans the route, but it reorders the intermediate points and the final destination to minimize the total travel time.

Note:

- You can select the same point for the start and end of the route. In this case, we will plan a round-trip route from there to all the intermediate points, and then back. For example, if you want to plan a route from your home to three malls and back, select your Home Address as the start and end, and select the malls as intermediate destinations. In this case ``Plan Route'' will visit malls in the order you specified, and ``Best Tour'' will pick the best order.
- If you select the End Address as your destination, ``Best Tour'' will always use that as the last point on your route. That is, in this case ``Best Tour'' will reorder the intermediate points, but not the final destination.

Routing Caveats

The routes are based on a road connection database we purchased from an outside map vendor (Tele Atlas, Inc.). While in general the data is fairly good, there are some systematic problems:

- The intent is to give a reasonable route, not a perfect route.
- The connection database knows about many one-way roads and turn restrictions, and avoids them. However, the database is not perfect. If the directions tell you to make an illegal turn, please don't do it!
- For complicated intersections, the text directions are not always enough. We recommend that you also use the thumbnail map for each turn.
- Some of the ``turns'' are things that a driver would regard as normal road following. However, it's difficult to tell that from the map data, so if there's any doubt, we describe it as a turn. In particular, if a road changes name (a common occurrence in NJ), we usually give the change as a turn.
- The map database does not have exit numbers for exits from Interstates. Therefore we identify the

exit by the road it connects to, as in `RAMP TO DIAMOND HILL RD`. Sometimes that matches the road sign, sometimes not.

- The map database does not have compass headings for highways. That is, the database says that a road is *I-78*, not *I-78 East*. We infer the heading from the road points. Unfortunately, the heading marked on signs does not always match the compass heading, so sometimes we get it wrong. If you spot an error, please send mail to **mapmaster@MapsOnUs.com**, giving your email address, Maps On Us user name, the offending highway name, and the correct heading.
- Watch out for *CONTINUE* vs *BEAR LEFT* vs *BEAR RIGHT*. Sometimes a ``bear left" turn will appear to be straight; other times a ``continue" turn will appear to be a slight turn to the left or right. These mistakes can happen when the town straightens an intersection, or when there was an error when digitizing the map.

Addresses

Forms for entering addresses appear in several places. You can specify the

- House number (simple numbers only, no hyphens or letter suffixes),
- Street name,
- Cross street name,
- City name,
- State (2 character code), and
- Zip code (5 digits).

We have two different formats for entering addresses. In one format, we give a separate box for each of the six fields above. In the other, there are two fields; the first is for the combined house number, street, and optional cross street, and the second is for the city, state and zip code.

Here are a few general notes about addresses:

- You do **not** have to fill in every field.
- Street and City names are **not** case sensitive.
- Street suffixes (RD, ST, etc.) and prefixes (EAST, WEST, etc.) help, but aren't required.
- If you leave the house number blank, we'll pick some point on that street.
- If you leave the State field blank, we'll use your default state.
- You set your default state from your Options page.

Partial Addresses & Ambiguous Addresses

You do **not** have to fill in every field in an address. We will do the best we can with the information you give. If you give enough information to uniquely specify the address, we'll use it. If there are several addresses which match your request, we'll give you a list of those addresses, and ask you to pick one.

For example, if you ask for `Pine St` in the city of `Summit`, we'll pick a point on that street. If you leave the city blank, we'll show you all the Pine Streets in your state, and let you pick one. We'll also do that if Summit doesn't have a Pine Street. If you just give a city or zip code, we'll use the center of town. And if you use that for planning a route, well, you'll end up in the center of town!

You can also omit the street suffix (Rd, St, Ave, etc). For example, suppose you ask for `Pine` in `Summit`. Then if Summit has both a Pine St and a Pine Ave, we'll show you both and ask you to pick one.

On the Map Page, you can enter an address for the map center. In this case, when you get an ambiguous address, you can select *several* addresses. For example, suppose you ask for a map of `123 Pine St` (no city or zip). We'll give you a list of all the 123 Pine Streets in your state. If you select more than one of

those Pine Streets, we'll redraw your map to show all your selections, and we'll label each one.

Address Tips & Caveats

Unfortunately, it is difficult to keep the street data up-to-date; in particular, a number of new streets are missing. We're working to improve our coverage, but that will take a while. The good news is that street (and city) names are not case sensitive, and we do recognize many abbreviations, such as Rd for Road, Av and Ave for Avenue, N for North, etc. However, except for that, the body of the street name must match exactly. For example, if you enter Oak Tree Rd, but our data says the street is Oaktree Rd, we probably won't find it. We are working on ``approximate matching" for street names, but that will take a while.

The good news is that we have a reasonably complete set of city names and zip codes. Also, zip codes often work better than city names (less room for spelling variations).

So if you're can't get a street address to work, first try dropping dropping the suffix (St, Ave, etc.). And if that doesn't work, leave the street blank and just use the city or zip.

Miscellaneous Topics

Bookmarking Pages

If you are a registered user, the best page to bookmark is your **User Welcome** page. That's the page you first see when you sign-on from http://MapsOnUs.switchboard.com.

Be careful when bookmarking any other page. We keep much of the information that defines your current map or route on our server, as part of your user profile. As a result, if you bookmark a map page, when you return, you will see your *latest* map, not the map when you bookmarked the page.

Linking To Specific Map Pages

If you want to add a ``draw map of my house" link from your web page to Maps On Us, please see our directed map drawing documentation for how to create the appropriate url. **Do not use the url that your browser displays!** That url might work at first, but eventually it will fail, or will give very confusing results to your visitors.

Error Messages

If an error occurs, we put an error message at the top of your page. To acknowledge the error message, click on the ``Clear Error Message" link that's under it. The error message is automatically cleared whenever we redraw the map or search the Yellow Pages database.

Latitude And Longitude

If you want to see latitude and longitude, go to the **General Options** page and select the ``Show Lat/Long" option. If you do that, we will add lat/long entry boxes to several pages, including the **Draw New Map** and the **Set Address** pages. We will also display lat/longs on the **Show Route** page.

We use a signed fractional degree format, with the longitude first. West longitudes and South latitudes are negative. For example, `-74.25 40.50` refers to 74 degrees 15 minutes West longitude, and 40 degrees 30 minutes North latitude. For the ``lower 48", the reference datum is NAD-27, not WGS-84. However, for North America, there's not much difference between those two.

Map Projection

Currently, we draw maps using a simple linear projection, with uniform cosine correction based on the center latitude (professional cartographers call this ``no projection," otherwise known as ``basic sleaze"). This means that meridians (lines of equal longitude) and parallels (lines of equal latitude) are drawn as straight lines, and they intersect at right angles. On any given map, all the one-degree-square cells will be drawn as rectangles of the same size. If the center of the map is at the equator, all those cells will be squares. As the center of the map moves north or south of the equator, the cell width shrinks (as you approach the poles, one degree of longitude becomes shorter). Distances are correct along the central horizontal and vertical axes, but are distorted elsewhere.

As long as we avoid polar regions, this projection (or lack thereof) is very good for city-level maps, is reasonable for state-level maps, and is tolerable for continental maps. The advantage of this projection is that it is very easy to convert a latitude and longitude to a x,y pixel coordinate on a map image, and vice versa. While this projection will not impress professional carthographers, its simplicity makes up for its lack of technical sophistication.

Be Kind To Your Browser

Each time you click on the map, or follow a link to another Maps On Us page, your Web browser usually adds a page to your history list. After a while your history list can get very long, and your browser can waste a lot of space caching old map image files. Therefore it's a good idea to periodically trim your history list by going back to your initial Maps On Us page.

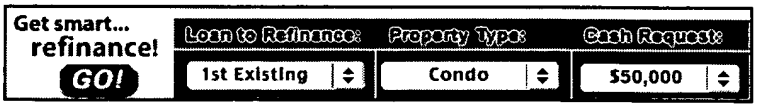
WARNING: In general, whenever you backup to a Maps On Us page, you should immediately ask your browser to reload the page. Otherwise you'll be looking at old data. This is particularly important for the **Current Map** and **Current Route** pages, because if you click on the map, we may interpret the click relative to your *current* map, not the map that is displayed on the old page. Also, until you reload the page, menus will show your old address book, not your current one.

A simple exception is for the **Search Yellow Pages** page. Suppose you've done a search, gotten the **Search Results** page, but don't like the results and want to try something else. In that case you can ask your browser to backup to the Search page, and then change the query and try again; you do *not* have to reload the Search page.

Monitor Resolution

By default, we draw maps assuming your monitor has a resolution of about 70 pixels per inch (or dots per inch, or dpi). If your monitor has a different resolution, you can enter it on your Options page. Note: The maps are always internally consistent, and the distance-ruler below that map is always correct. You only need to specify the resolution if you want to the map scale to be accurate, *as measured on your screen.* In other words, if the map scale is 1.0 mi/in, an inch on your screen will only be a mile if you give us the correct resolution for your monitor.

In general, if you set the resolution correctly for your monitor, the map will also print with the correct scale (your browser should take care of that when printing).



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data by ACXIOM

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Tele Atlas

Welcome To Geocode.com February 12, 2003

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Postal Point Details

Usage
Typically the 9G file is used as the primary file for geocoding based on ZIP+4 code. In order to generate the "plus four" of the ZIP+4 code a user will normally pre-process his/her address list through postal standardization software. The other files (7G, CRG, 5G and 3G) are then used as fall-back files if relevant information is not available to geocode at the ZIP+4 level.

For example: if an input address has a ZIP+4 code then the user will be able to look up the coordinate and associated geographic codes in the 9G file. However, if the input address does not have a ZIP+4 code, and only contains a 5 digit ZIP code, then the user can fall back to the 5G file to arrive at a coordinate and associated codes.

Dealing with One-To-Many relationships
It is common for the situation to arise where there is a one to many relationship between a postal entity (Zip+4, ZIP+2, etc.) and more than one geographic entity (MSA, State, County, etc.) For example, 5 digit ZIP codes do cross county boundaries.

In these cases, the value of a particular geographic code is determined by a voting scheme. The code value with the most votes is the value inserted in the file.

In addition, all geographic codes have an associate percentage field that gives the fraction of ZIP+4 records that were contained in that particular geographic code. If the number of codes is so widespread that the percentage of the field with the most votes is less than one percent then no code value is given. This may happen, for example, in the case of the block group associated with a three digit ZIP code in the PostalPoints 3G file.

Geographic Codes
In each of the files the associated geographic codes are:

- MSA (Metropolitan Statistical Area) code
- FIPS State Code
- FIPS County Code
- FIPS MCD/CCD (Minor Civil Division / Census County Division) Code
- Census MCD/CCD Code
- FIPS Place/CDP (Census Designated Place) Code
- Census Place/CDP Code
- Census Tract
- Census Block Group

PostalPoints File Layout

Field Name	Pos	Length	Description	Notes
ZIP	1	5	5-digit ZIP	
ZIP4_lo	6	4	Low ZIP+4	Last 2 digits blank in 7G. Blank in 5G, 3G.
ZIP4_hi	10	4	High ZIP+4	Last 2 digits blank in 7G. Blank in 5G, 3G.
ZIP4_rec_type	14	1	ZIP+4 Record type	H = Highrise; F = Firm; S = Street; G = General Deliv; P = PO Box; R = Rural Route. Blank in 7G, 5G, 3G.
carrier_route	15	4	USPS Carrier Route	Blank in 3G.
carrier_route_%	19	2	Percentage of matches within majority Carrier Route	Blank = 100%.
match_code	21	1	Match Code	1 = street segment match; 2 = segment near match; 3 = ambiguous match; 4 = 7-digit ZIP centroid; 5 = 5-digit ZIP centroid; 6 = 3-digit ZIP centroid; 7 = non match.
latitude	22	10	Latitude	Optionally NAD27 or WGS84 as requested.
longitude	32	11	Longitude	Optionally NAD27 or WGS84 as requested.
MSA_code	43	4	Metropolitan Statistical Area (MSA) code	
MSA_code_%	47	2	MSA %	Blank = 100%.
FIPS_state	49	2	FIPS State code	Numeric.
FIPS_state_%	51	2	State %	Blank = 100%.
FIPS_county	53	5	FIPS County code	State: 2 digits; County: 3 digits.
FIPS_county_%	58	2	County %	Blank = 100%
FIPS_mcd	60	10	FIPS Minor Civil Division	State: 2 digits; County: 3 digits; MCD: 5 digits.
FIPS_mcd_%	70	2	MCD %	Blank = 100%.
census_mcd	72	3	Census MCD Code	Same State, County and % as FIPS_mcd.
FIPS_place	75	7	FIPS Place Code	State: 2 digits; Place: 5 digits.
FIPS_place_%	82	2	Place %	Blank = 100%.
census_place	84	4	Census Place Code	Same State and % as FIPS_place.
census_tract	88	11	Census Tract Code	State:2 digits; County: 3 digits; Tract: 6 digits. Implied decimal between 10th and 11th digits.
census_tract_%	99	2	Census Tract %	Blank = 100%.
census_blkgp	101	12	Census Block Group Code	Same format as census_tract, with Block Group digit appended.
census_blkgp_%	113	2	Census Block Group %	Blank = 100%.
name_src	116	1	Name Source	M = Matched to map name; S = Matched to name modified to achieve Standardization; Blank for centroid matches.

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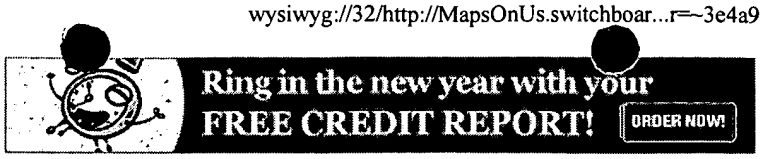

Route Summary	
Start:	**Start Point (2000 S Eads St, Arlington, VA)**
End:	**End Point (2451 S Crystal Dr, Arlington, VA)**
Totals:	**0.6 miles, 2 minutes, 5 turns** (Fastest Route)

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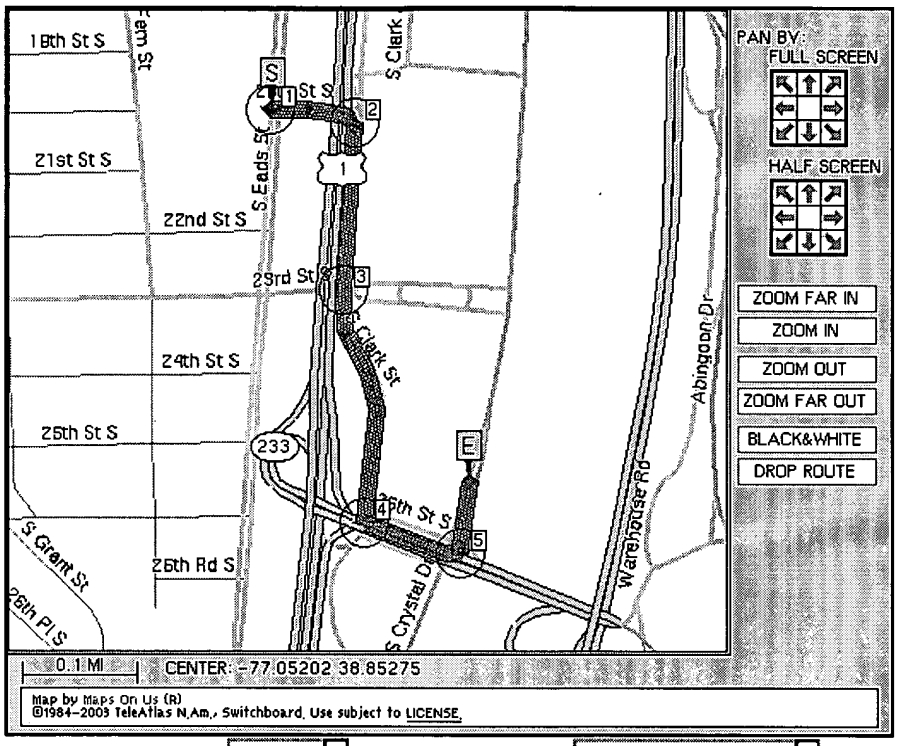

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For a detailed map of a turn, click on the turn number.
To see the route in a non-tabular format, click here.

	Go	And Then ...	Total Miles	
Start		Head SOUTH-EAST on S EADS ST, From **Start Point (2000 S Eads St, Arlington, VA)**	0.0	**Replace this column with detailed maps for all turns**
1	Less than .1 mi	TURN LEFT onto 20TH ST S	0.0	
2	0.1 mi	TURN RIGHT onto S CLARK ST	0.1	
3	0.1 mi	CONTINUE onto S BALL ST	0.2	
4	0.2 mi	TURN LEFT onto 26TH ST S	0.4	
5	0.1 mi	TURN LEFT onto RAMP	0.5	
End	Less than .1 mi	**End Point (2451 S Crystal Dr, Arlington, VA)**	0.6	

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Entertainment
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City, State, Post Office

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Doctors Hospitals Dentists Pharmacies

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Dining Family Style Restaurant
French German Gourmet Food
Greek Hawaiian Home Style
Cooking Homemade Foods
Hunan Indian Italian Italian
American Jamaican Japanese
Jazz Bar Juice bar Korean
Mandarin Mediterranean
Mexican Mid-Eastern Pub
Russian Sashimi Sports Bar
Steak House Sunday Buffet
Sushi Sushi Bar Szechwan Thai
Vegetarian Vietnamese

Menu Items

Aged Beef
American Cuisine
Angus Burgers
Appetizers

Aged Beef American Cuisine
Angus Burgers Appetizers
Bagels Baked Breads Barbecue
Beef Brisket Beer Beverages
Breadsticks Brick Oven Pizza
Burgers Cakes Calzones
Cantonese Cheese Sticks
Chicken Chicken Wings Chili
Chocolate Chops Chow Mein
Clam Bakes Cocktails Coffee
Crab Crab Cakes Crabs
Croissant Cuisine Daily Specials
Danish Deep Dish/Pan Style
Pizz Desserts Dim Sum Dinner
Specials Drink Entrees Fajitas
Fish Fruit Trays Gyros
Handcrafted Beverages Hibachi
Home Catering Homemade
Desserts Homemade Sausages
HorD'oeuvres Hot Dogs Ice
Cream Italian Kabobs Kid's
Menu Lamb Lasagna Lobster
Louisiana Food Lunch Specials
Meat Meat & Vegetarian Dishes
Mediterranean Cuisine No MSG
Added / No MSG Noodles Oyster
Bar Oysters Party Subs/Grinders
Pasta/Spaghetti Pastries Peking
Duck Pies Pizza Pork Potato
Skins Poultry Prime Rib Ribs
Rolls Salad Bar Salads
Sandwiches Sausage Seafood
Shrimp Smoked Meats Soups
Specialty Pizzas Spicy Food
Squid Steaks Stromboli
Subs/Grinders/Hoagies Tandoori
Tempura Teriyaki Thin/Crispy
Crust Pizza Traditional/Classic
Pizz Veal Vegetables Vegetarian
Dishes Vegtable Trays Wedding
Cakes Wine Bar Wines Wings
Wraps

Services

4-Wheel Alignment
Afternoon Brunch
Airport Shuttle
Anniversary Parties

4-Wheel Alignment Afternoon
Brunch Airport Shuttle
Anniversary Parties Auto Repair
Baby Showers Backyard
Barbeque Bakery Ballroom
Banquet Facilities Banquets Bar

Found: 22145 businesses shown1-10

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Mc Lean, VA 22101
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Categories: Restaurants

Map | Directions | What's Nearby?

Rocky's Cafe

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Washington, DC 20009
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Categories: Restaurants

Map | Directions | What's Nearby?

Magill's Famous Pizza & Buffet

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Annandale, VA 22003
Phone: (703)750-0210
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Kaffa House

1212 U Street NW
Washington, DC 20009
Phone: (202)462-1212
http://www.kaffahouse.qpg.com/

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Route 7 Diner

5616 Leesburg Pike
Falls Church, VA 22041
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Toro Tapas & Grill

4053 S 28th Street
Arlington, VA 22206
Phone: (703)379-0502
http://www.torotapas.qpg.com/

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Reset

Wa[redacted]on, DC 20002
Phone: (202)398-2393
Fax: (202)398-7110
Visit Web site

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Bethesda, MD 20814
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http://www.londonteahouse.com
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Jam Doung

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Washington, DC 20002
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Fax: (202)483-2446
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Next Page ▶

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Business Name Search Tips:
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City: Alexandria
State State List: VA
☑ Include surrounding areas
Search

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Find Out What's Nearby This Selected Place:

Start Point (2000 S Eads St, Arlington, VA)
End Point (2451 S Crystal Dr, Arlington, VA)
Map Center

What's Nearby?

Find Out What's Nearby This Address:

Fill in some or all of the fields below. [Explain Addresses]

Street Address:

(e.g., *600 Mountain Ave,* or *Mountain Ave & South St,* or just *Mountain Ave*)

City, State
Zipcode:

(e.g., *Murray Hill, NJ 07974,* or *Murray Hill, NJ,* or *07974,* or just *NJ*)

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Totals:	**0.6 miles, 2 minutes, 5 turns** (Fastest Route)

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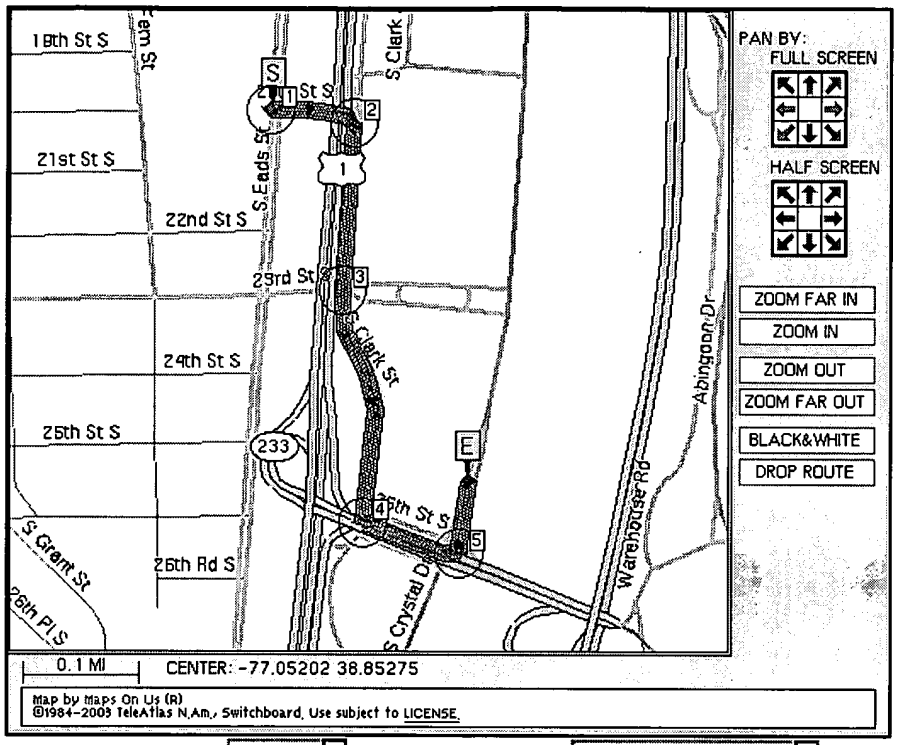

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Turn-by-Turn Directions

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To see the route in a non-tabular format, click here.

	Go	And Then ...	Total Miles	Replace this column with detailed maps for all turns
Start		Head SOUTH-EAST on S EADS ST, From **Start Point (2000 S Eads St, Arlington, VA)**	0.0	
1	Less than .1 mi	TURN LEFT onto 20TH ST S	0.0	
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4	0.2 mi	TURN LEFT onto 26TH ST S	0.4	
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End	Less than .1 mi	**End Point (2451 S Crystal Dr, Arlington, VA)**	0.6	

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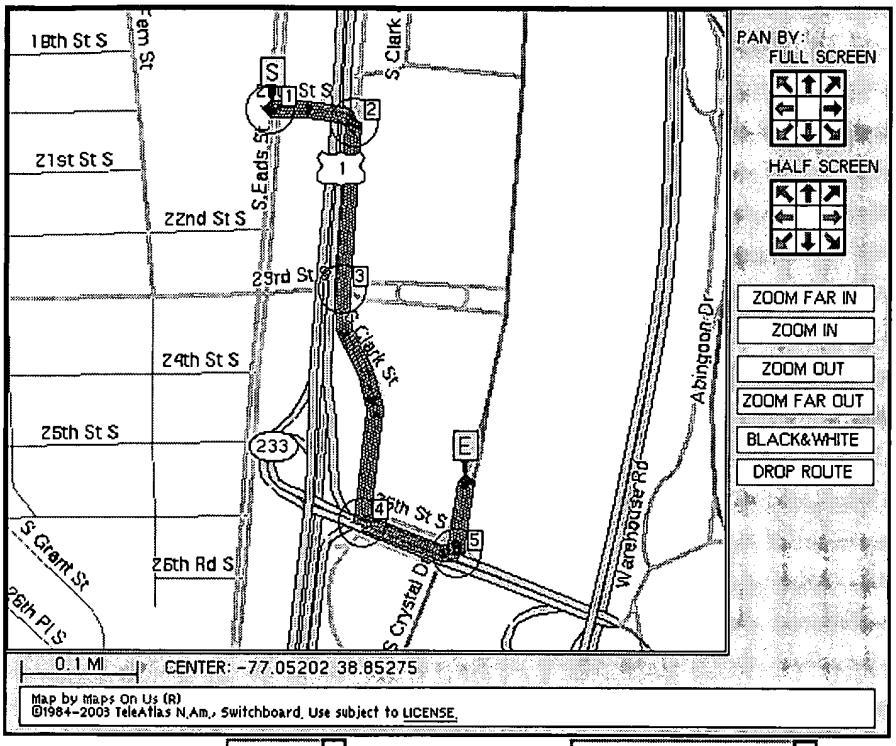

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5	0.1 mi	TURN LEFT onto RAMP	0.5	
End	Less than .1 mi	**End Point (2451 S Crystal Dr, Arlington, VA)**	0.6	

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